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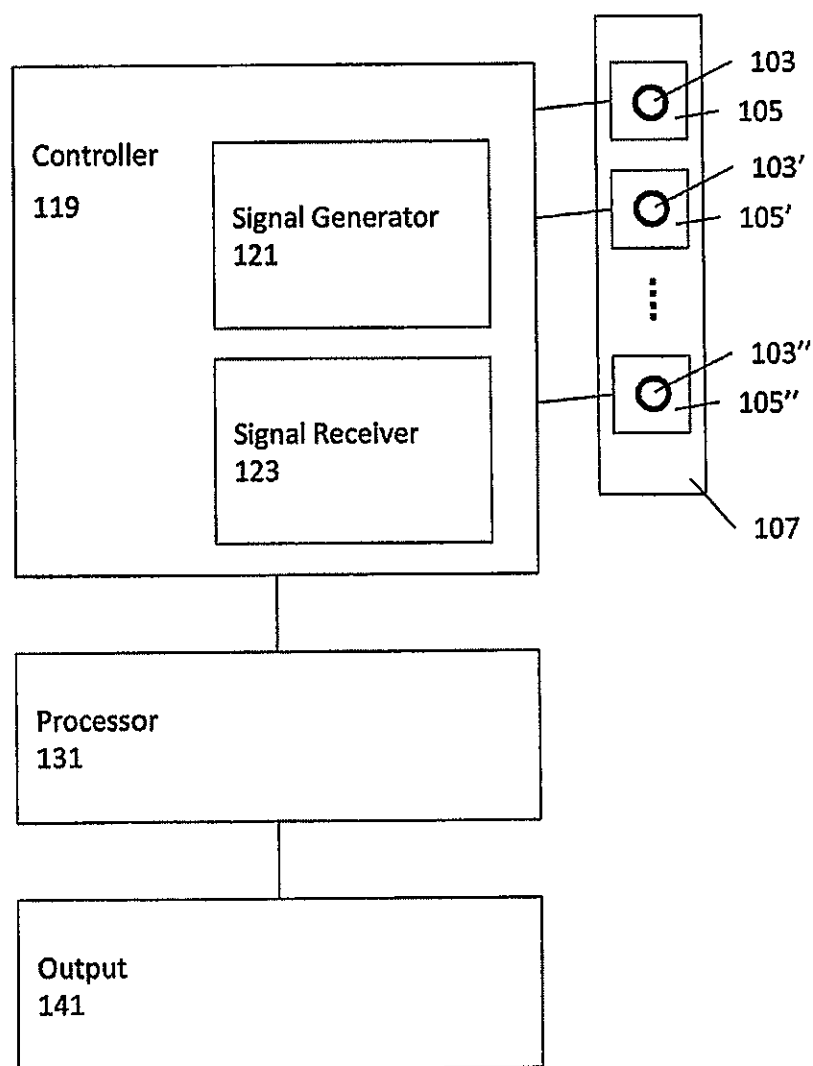


FIG. 1

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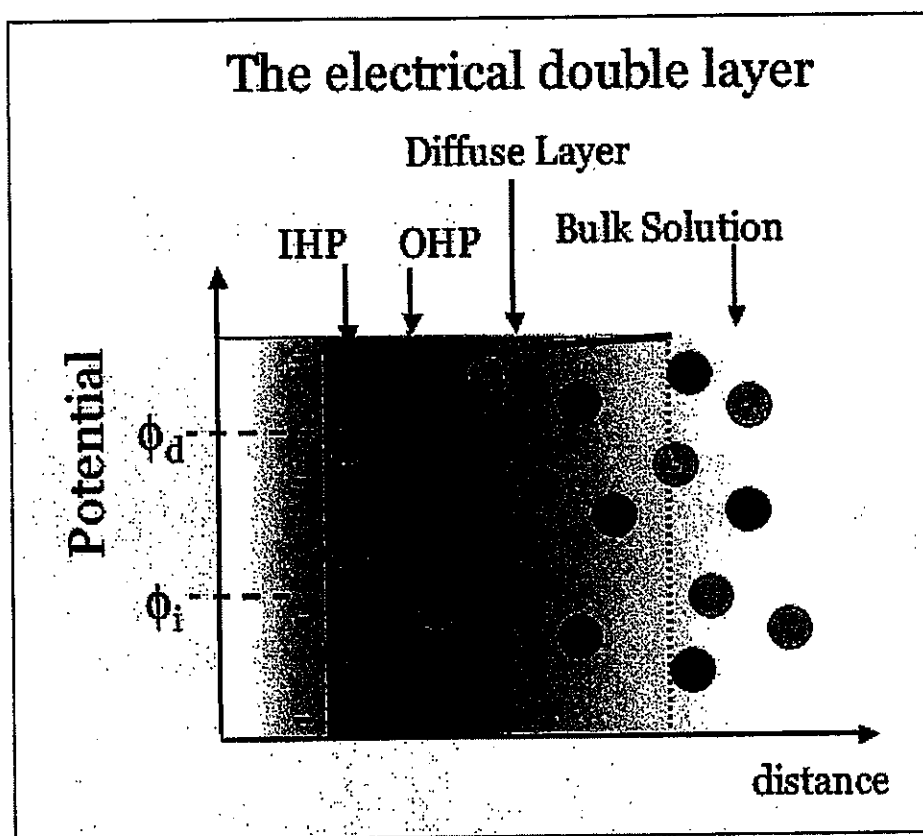


FIG. 2

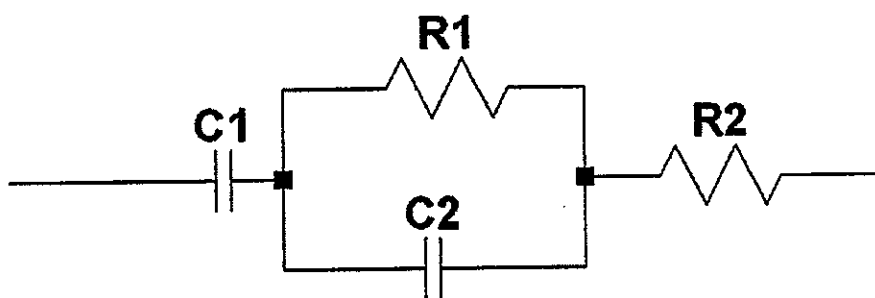
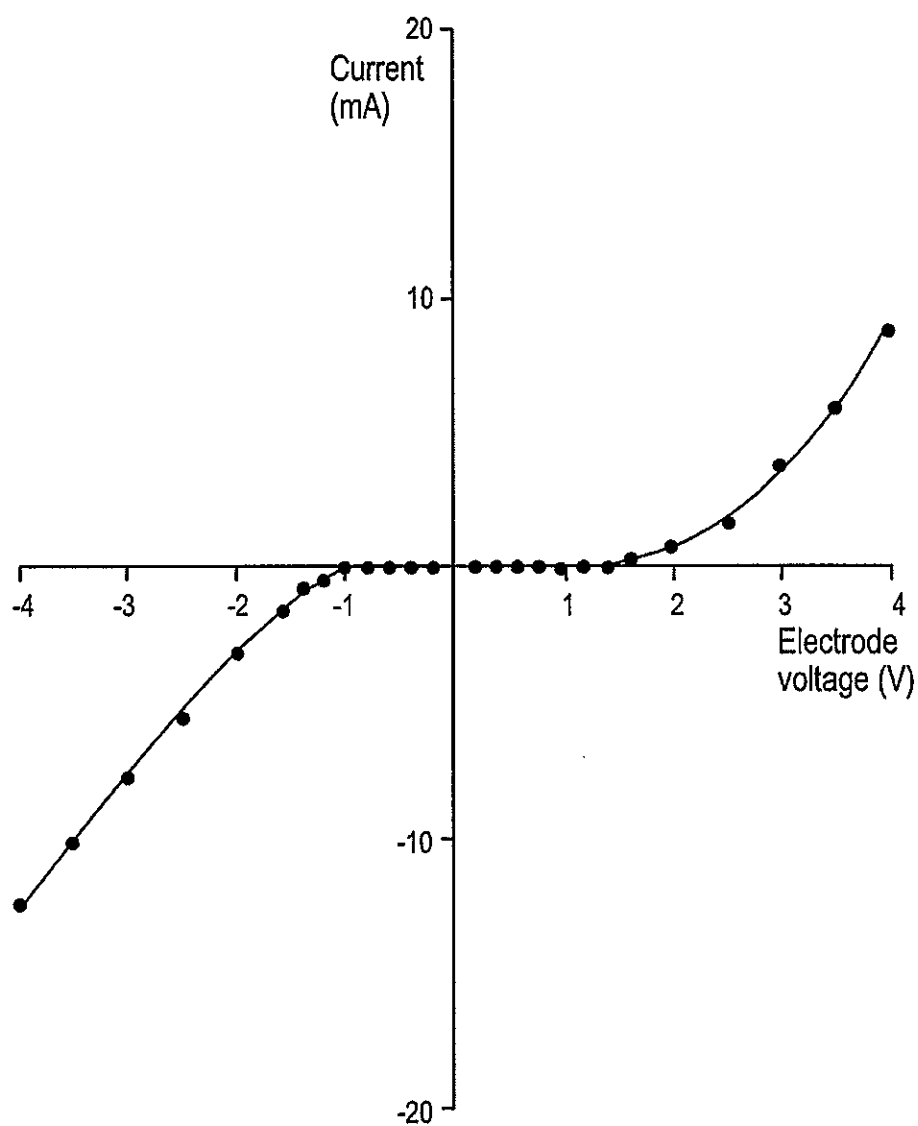


FIG. 3

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**FIG. 4**

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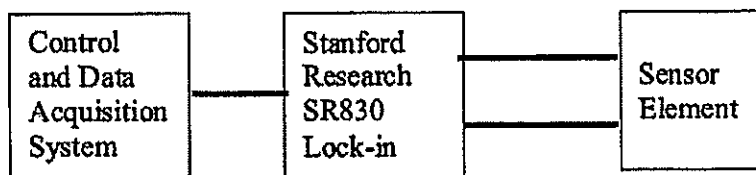


FIG. 5

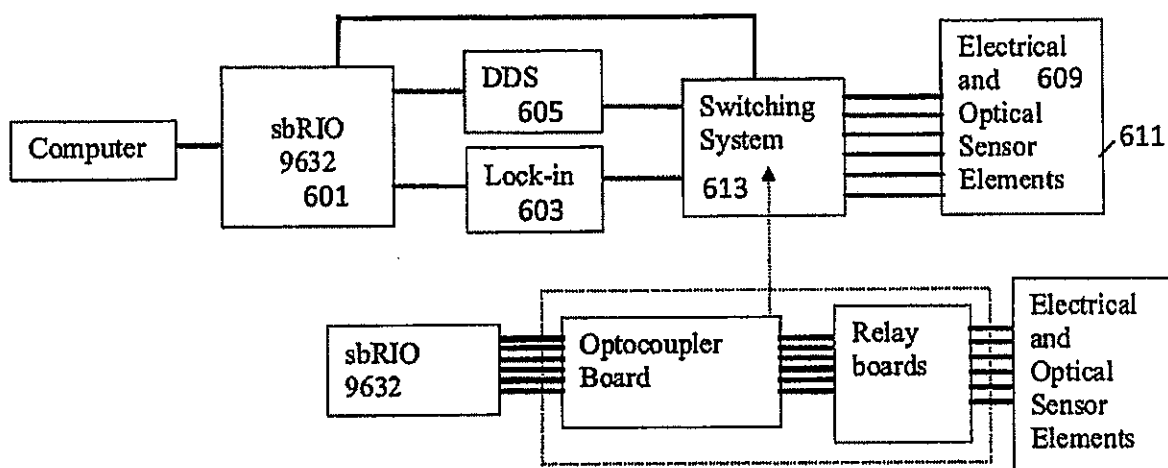


FIG. 6

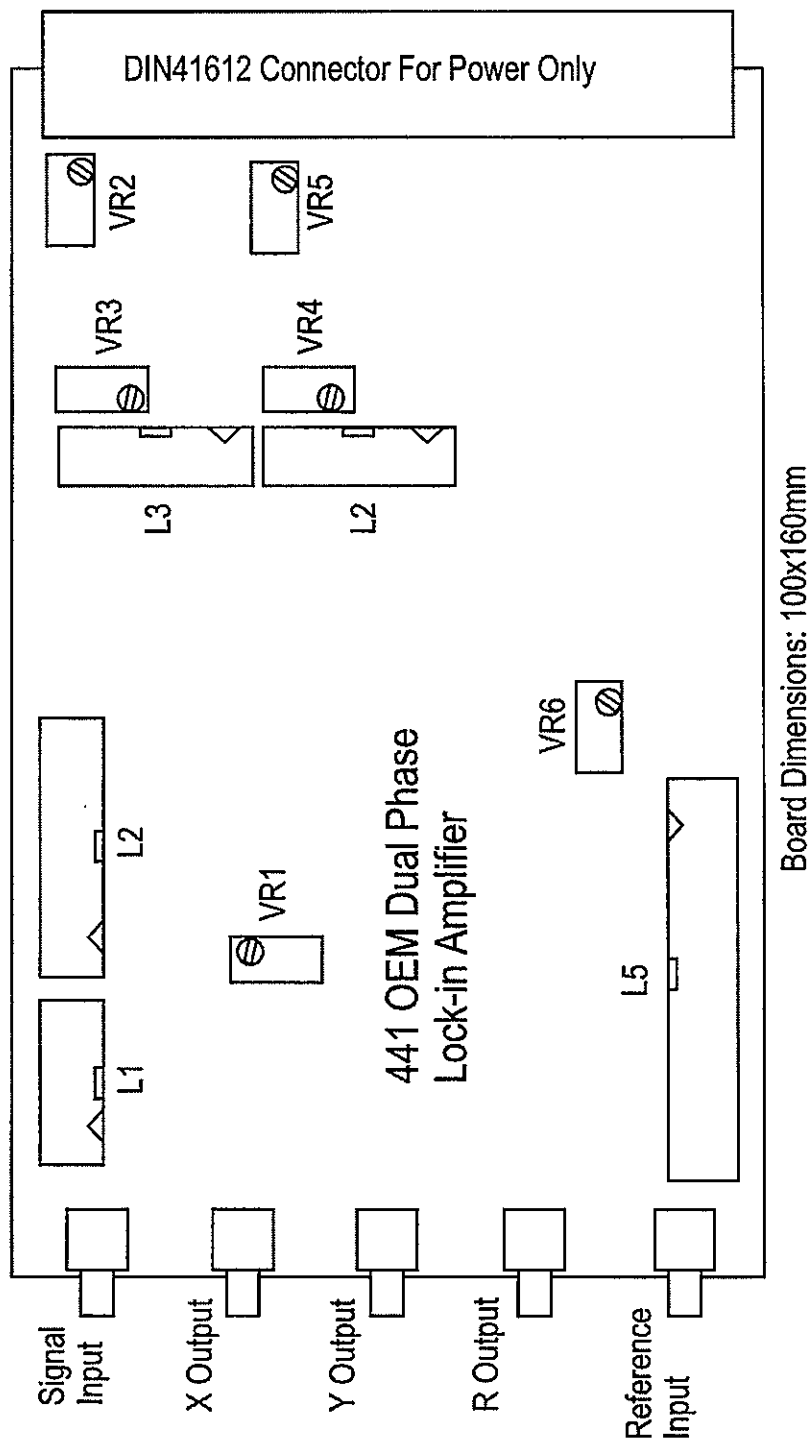


FIG. 7A

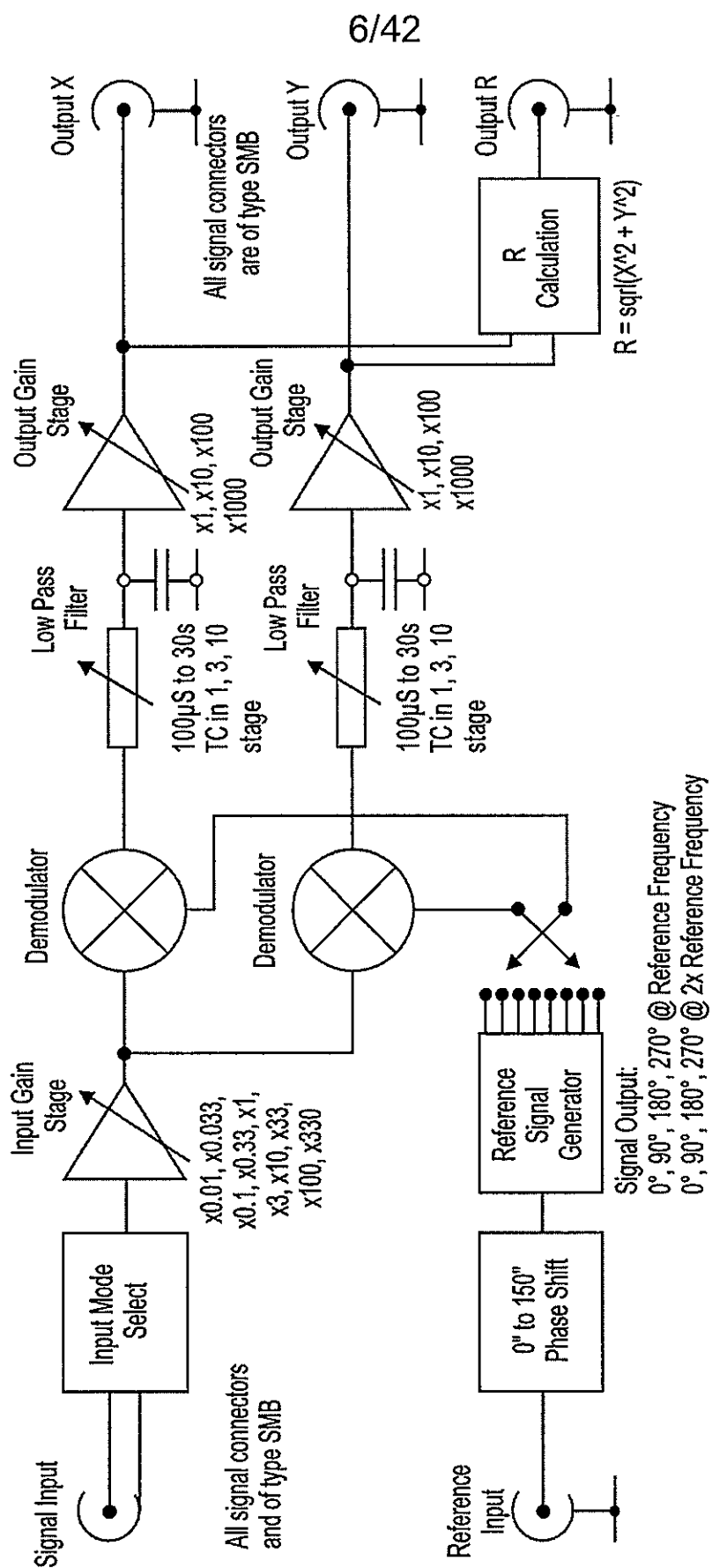


FIG. 7B

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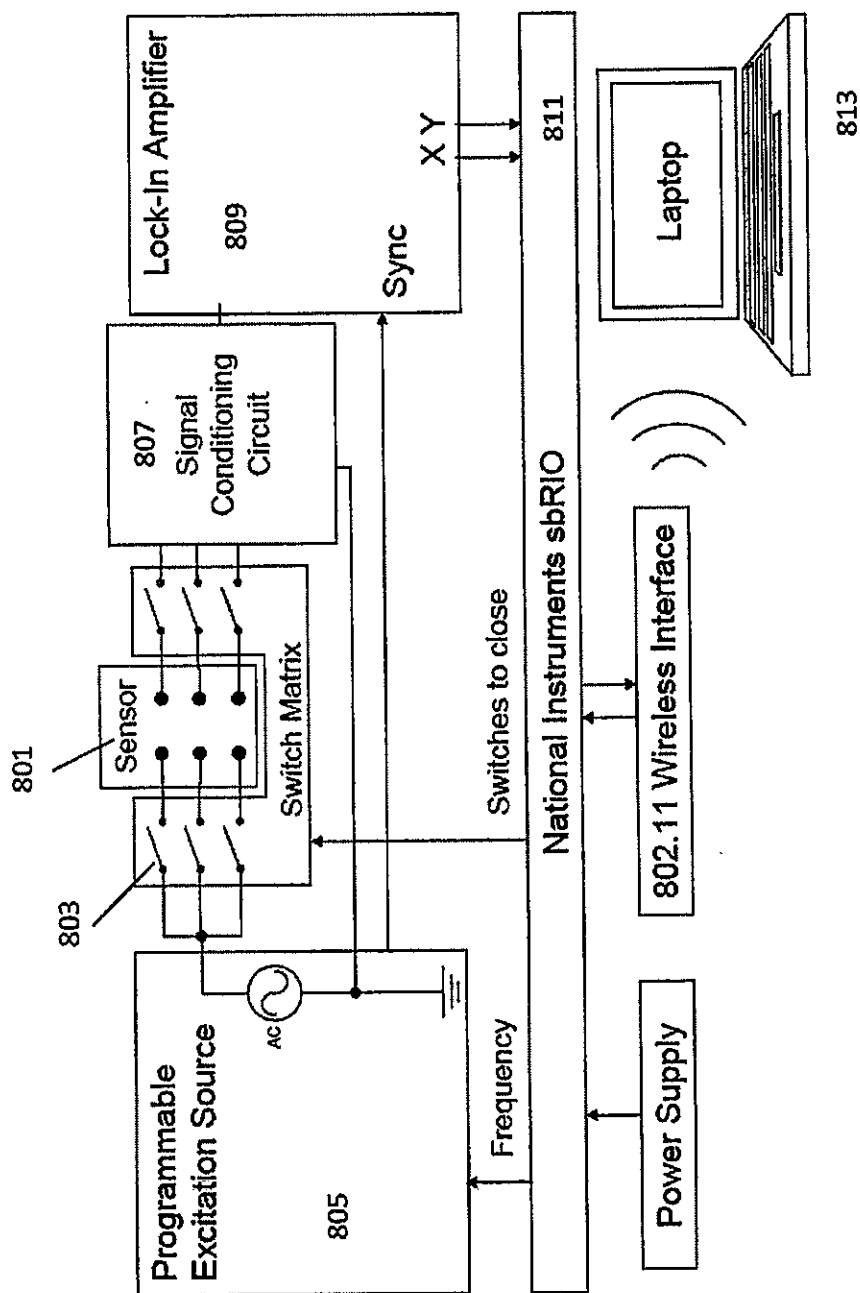


FIG. 8

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FIG. 9

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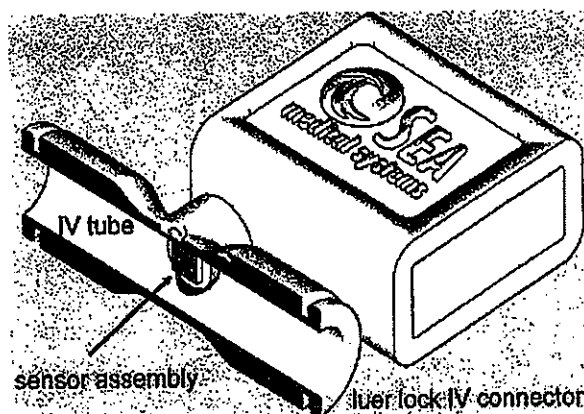


FIG. 10

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FIG. 11

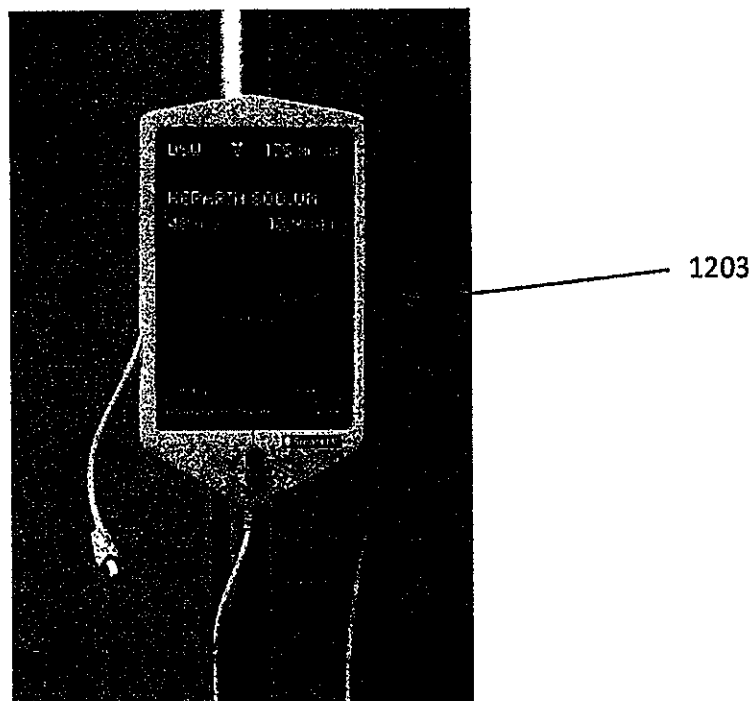


FIG. 12

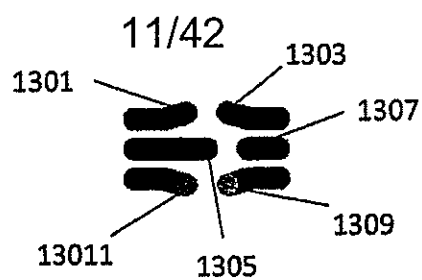


FIG. 13A

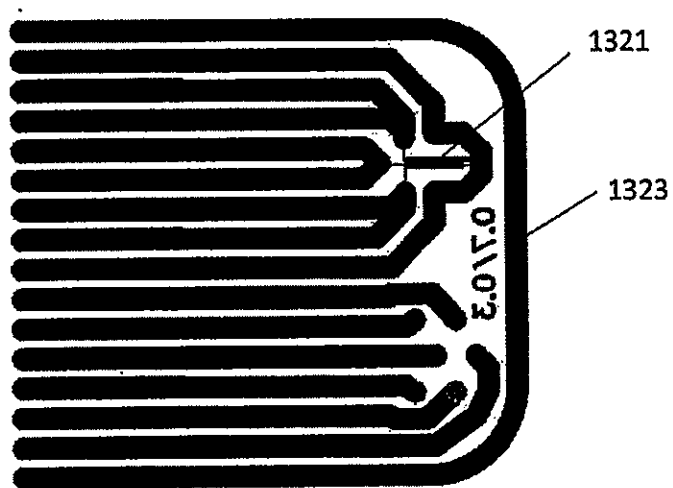


FIG. 13B

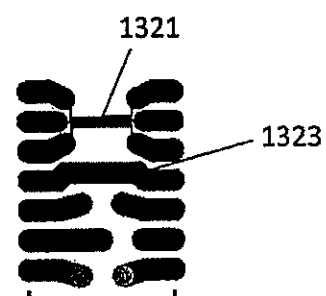


FIG. 13C

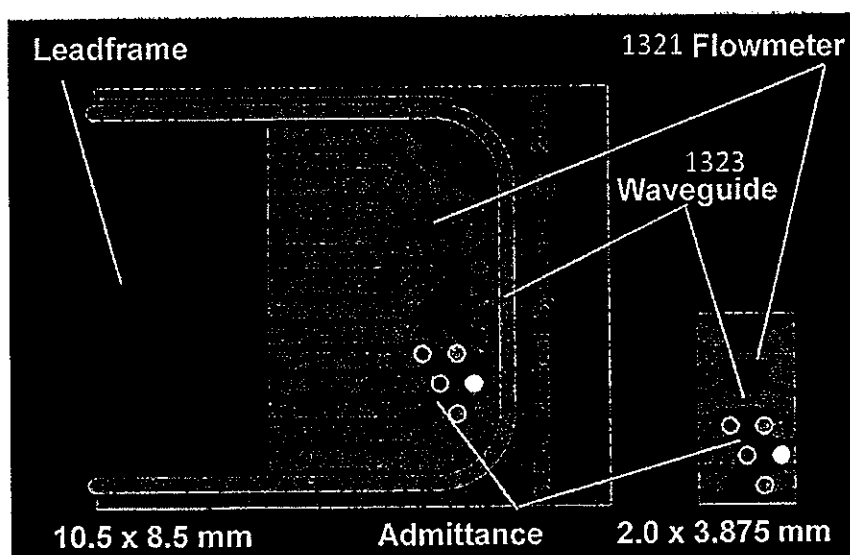


FIG. 13D

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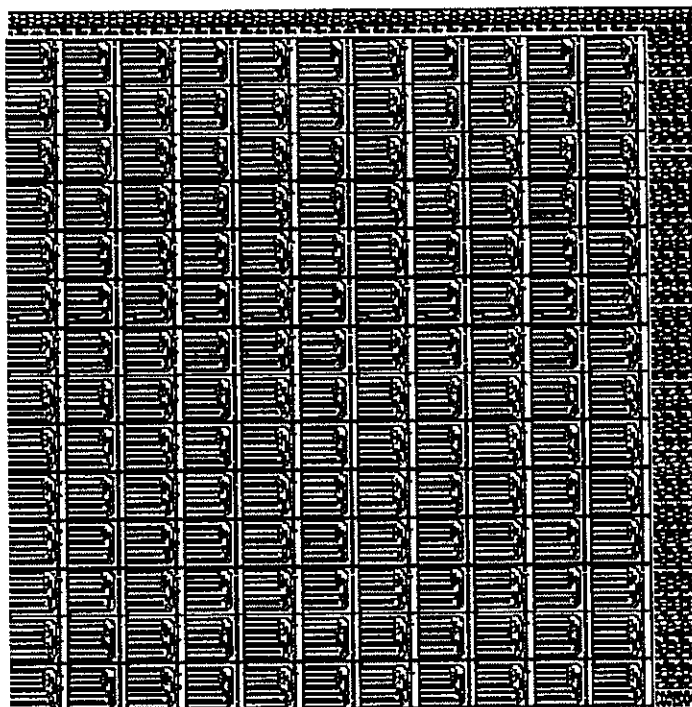


FIG. 14

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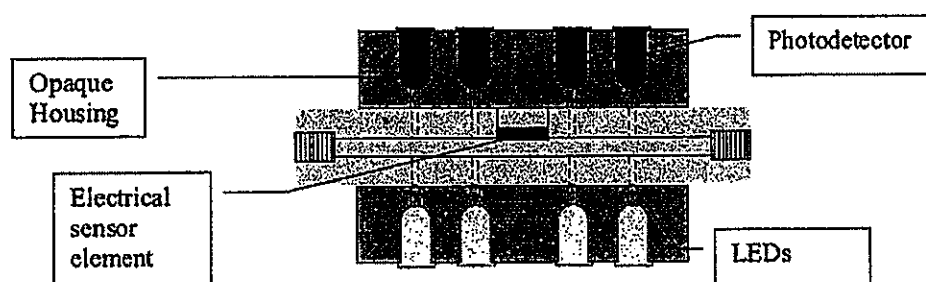


FIG. 15A

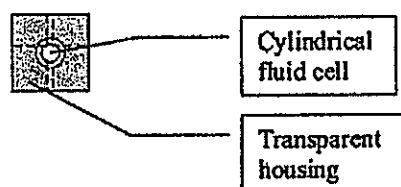


FIG. 15B

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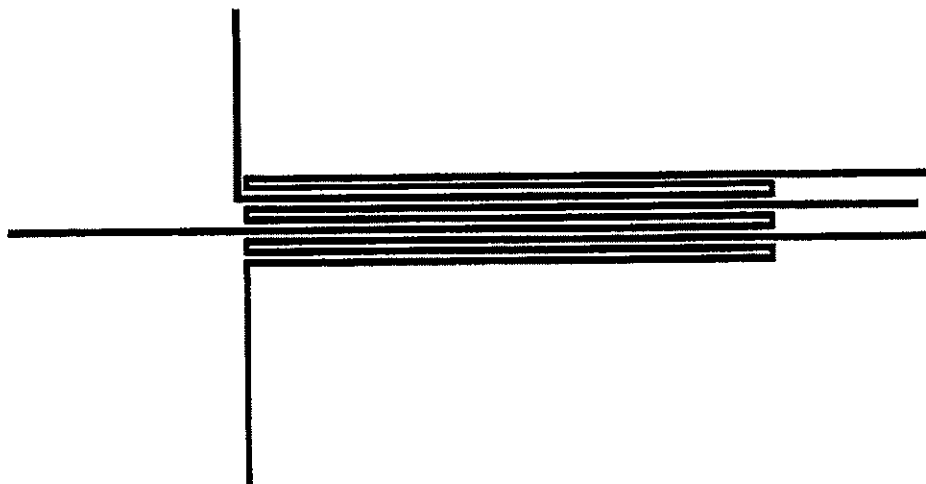


FIG. 16

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	10		20		30		40		50		60		70		80		90		100	
	1703	1705																		
Au-Au																				
Au-Pd																				
Au-Ti																				
Pd-Pd																				
Pd-Ti																				
Ti-Ti																				

FIG. 17A

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	10		20		30		40		50		60		70		80		90		100	
Au-Au	1703	1705																		
Au-Pd																				
Au-Ti																				
Pd-Pd																				
Pd-Ti																				
Ti-Ti																				
IR1																				
IR2																				
Vis																				
UV																				

FIG. 17B

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Drug	Concentration	Drug	Concentration
Heparin sodium	100 units/mL	Carboplatin	1 mg/mL
Insulin (regular)	1 unit/mL	Cyclophosphamide	2 mg/mL
Midazolam	0.5 mg/mL	Cytarabine	2 mg/mL
Dopamine	2 mg/mL	Etoposide	2 mg/mL
Dobutamine	500 mcg/mL	Fluorouracil	10 mg/mL
Furosemide	4 mg/mL	Nitroprusside sodium	0.2 mg/mL
Pancuronium	1 mg/mL	Succinylcholine	20 mg/mL
Vecuronium	1 mg/mL	Lorazepam	0.5 mg/mL
Atracurium	0.5mg/mL	Phenylephrine	0.4 mg/mL
Morphine	0.5 mg/mL	Potassium chloride	40 mEq/L
Hydromorphone	0.5 mg/mL	Magnesium sulfate	200 mg/mL
Fentanyl Citrate	0.02 mg/mL	Sodium chloride	3%
Propofol	5 mg/mL	Nicardipine	0.1 mg/mL
Epinephrine	0.008 mg/mL	Vancomycin	5 mg/mL
Norepinephrine	0.008 mg/mL	Vasopressin	0.5 u/mL

FIG. 18A

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Drug	Concentration	Diluent
Atracurium	0.5mg/mL	NS
Atracurium	0.5mg/mL	D5W
Bupivacaine	0.10%	NS
Bupivacaine	1.00%	NS
Carboplatin	1 mg/mL	NS
Cyclophosphamide	2 mg/mL	NS
Cytarabine	2 mg/mL	NS
Dobutamine	0.5mg/ml	D5W
Dobutamine	500 mcg/mL	NS
Dopamine	2 mg/mL	NS
Epinephrine	0.008 mg/mL	NS
Etoposide	2 mg/mL	NS
Fentanyl + Bupivacaine	0.002mg/ml+ 0.1%	NS
Fentanyl Citrate	0.002mg/ml	NS
Fentanyl Citrate	0.02 mg/mL	NS
Fentanyl Citrate	0.1mg/ml	NS
Fentanyl Citrate	1mg/ml	SW
Fluorouracil	10 mg/mL	NS
Furosemide	4 mg/mL	NS
Heparin + Midazolam	100U/ml+0.5mg/ml	NS
Heparin + Vancomycin	1000U/ml+5mg/ml	NS
Heparin sodium	0.3U/ml	NS
Heparin sodium	0.3U/ml	D5W
Heparin sodium	1U/ml	NS
Heparin sodium	2U/ml	NS
Heparin sodium	2U/ml	D5W
Heparin sodium	10U/ml	NS
Heparin sodium	10U/ml	D5W
Heparin sodium	30U/ml	NS
Heparin sodium	100U/mL	NS
Heparin sodium	100U/ml	D5W
Heparin sodium	300U/ml	NS
Heparin sodium	1000U/ml	NS
Heparin sodium	1000U/ml	D5W
Heparin sodium	2500U/ml	NS
Heparin sodium	250U/ml	SW
Hydromorphone	0.5 mg/mL	NS
Insulin	0.01U/ml	NS

Insulin	0.05U/ml	NS
Insulin	0.1U/ml	NS
Insulin	0.3U/ml	NS
Insulin	1U/ml	NS
Insulin	3U/ml	NS
Insulin	10U/ml	NS
Insulin	30U/ml	NS
Insulin	100U/ml	NS
Insulin	500U/ml	NS
Lorazepam	0.5 mg/mL	NS
Magnesium sulfate	200 mg/mL	NS
Midazolam	0.5 mg/mL	NS
Morphine	0.5 mg/mL	NS
Nicardipine	0.1 mg/mL	NS
Nicardipine	0.1mg/ml	D5W
Nicardipine	0.5mg/ml	NS
Nitroglyceride sodium	0.2 mg/mL	NS
Norepinephrine	0.008 mg/mL	NS
Norepinephrine + Dopamine	0.008mg/ml+2mg/ml	NS
Pancuronium	1 mg/mL	NS
Phenylephrine	0.1 mg/mL	SW
Phenylephrine	0.4 mg/mL	NS
Potassium chloride	0.001 meq/ml	D5W
Potassium chloride	0.003 meq/ml	D5W
Potassium chloride	0.01 meq/ml	D5W
Potassium chloride	0.04 mEq/ml	NS
Potassium chloride	0.04 meq/ml	D5W
Potassium chloride	0.08 meq/ml	D5W
Potassium chloride	0.1 meq/ml	D5W
Potassium chloride	0.4 meq/ml	D5W
Potassium chloride	0.8 meq/ml	D5W
Propofol	5 mg/mL	NS
Propofol	5mg/ml	D5W
Sodium chloride	3%	SW
Succinylcholine	20 mg/mL	NS
Vancomycin	5 mg/mL	NS
Vasopressin	0.5 U/ml	NS
Vasopressin	0.5U/ml	D5W
Vecuronium	1 mg/mL	NS

FIG. 18B

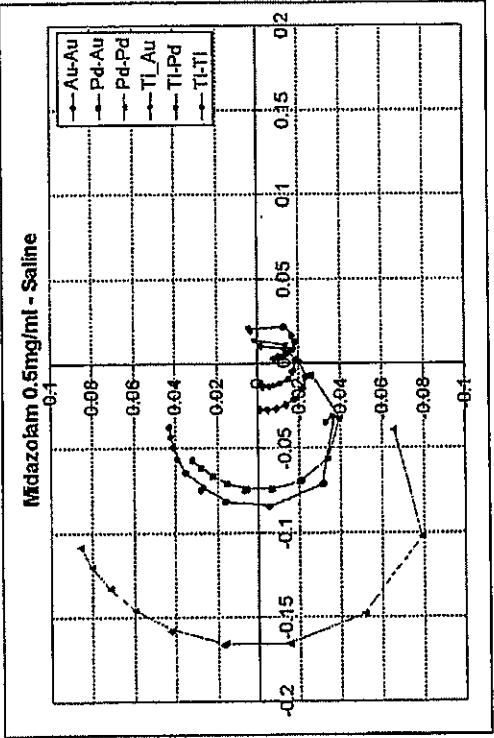


FIG. 19A

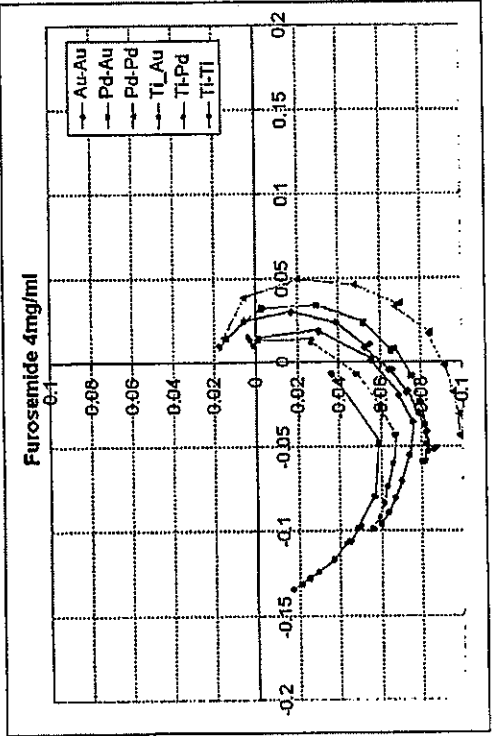


FIG. 19B

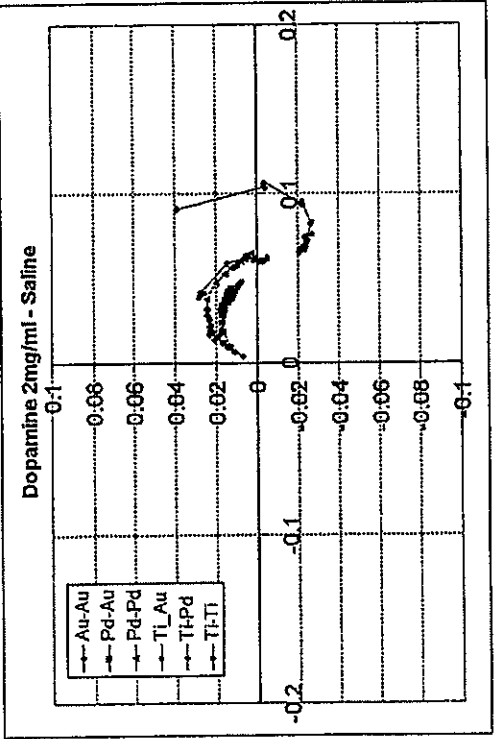


FIG. 19C

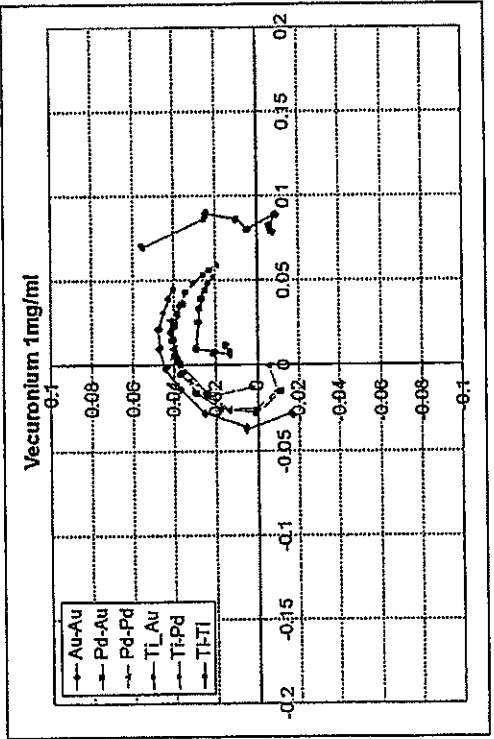


FIG. 19D

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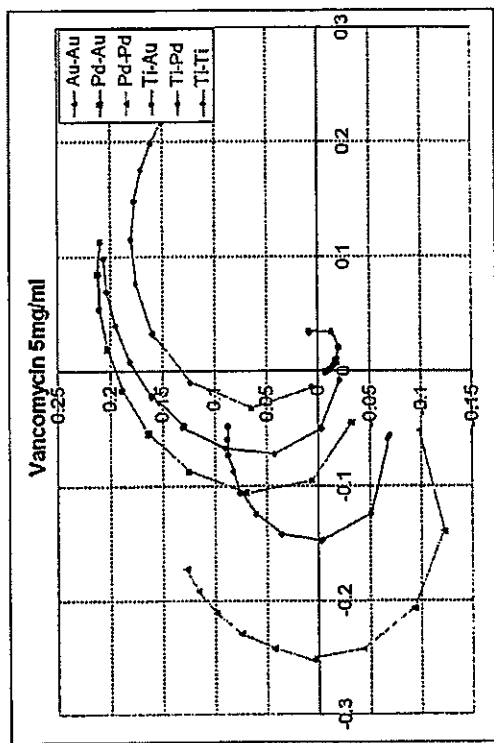


FIG. 19F

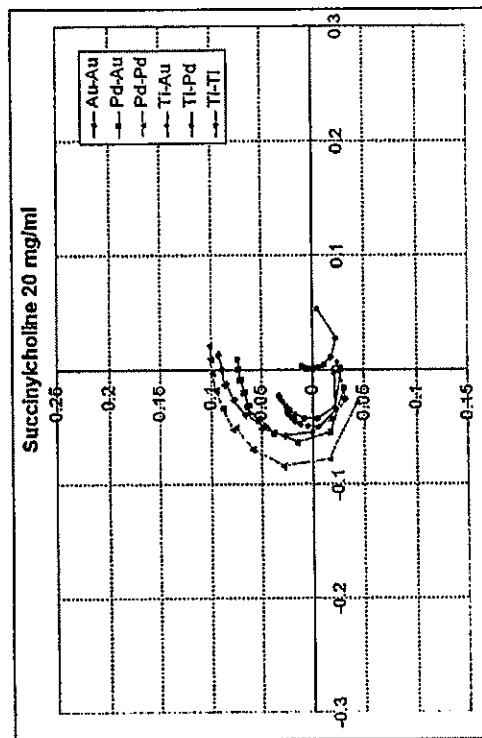


FIG. 19H

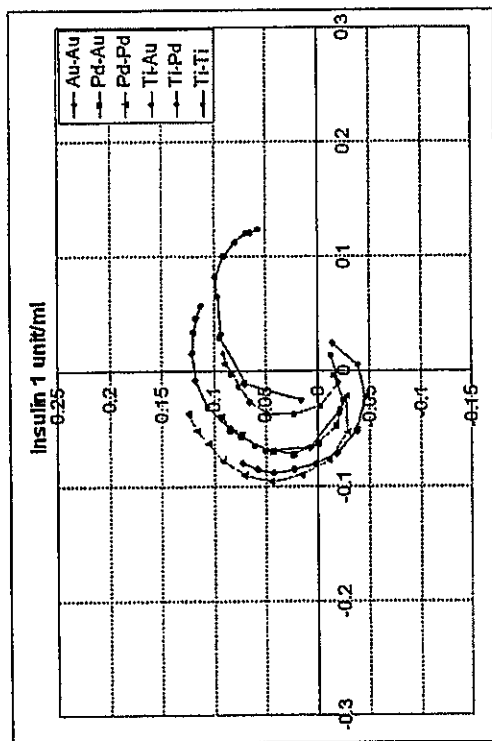


FIG. 19E

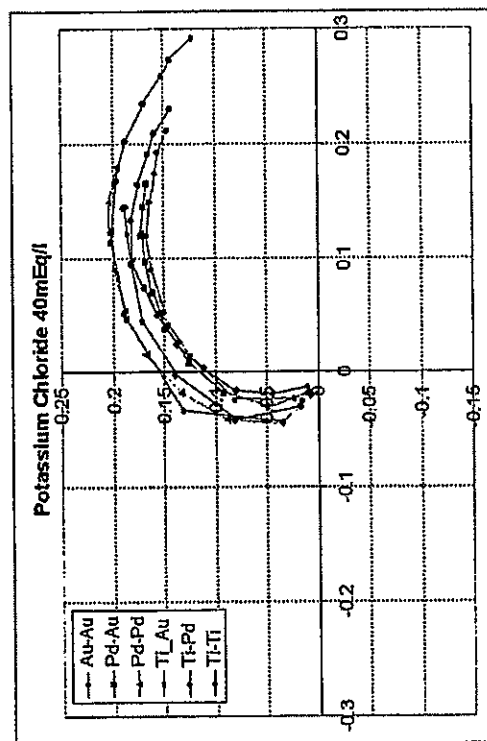


FIG. 19G

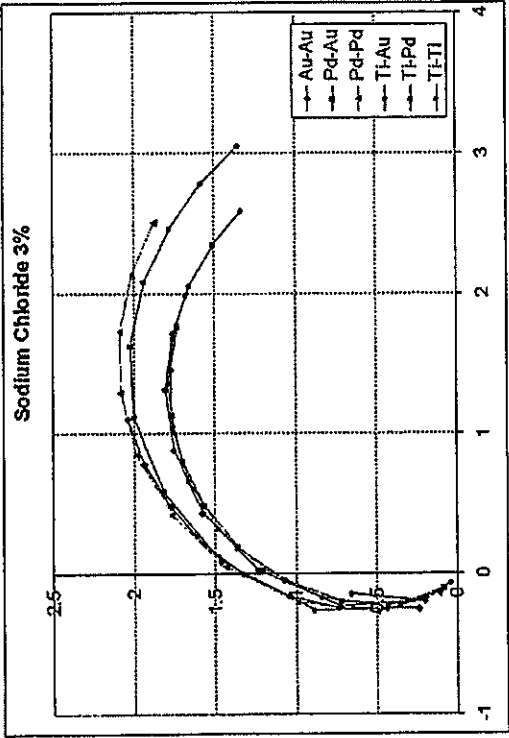


FIG. 19J

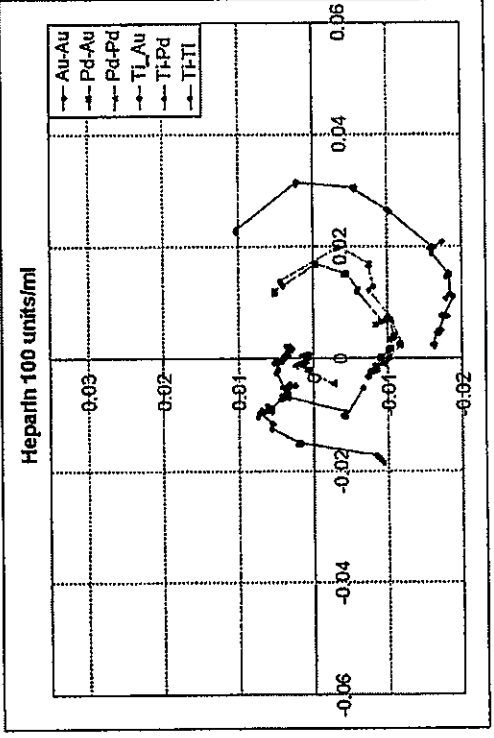


FIG. 19L

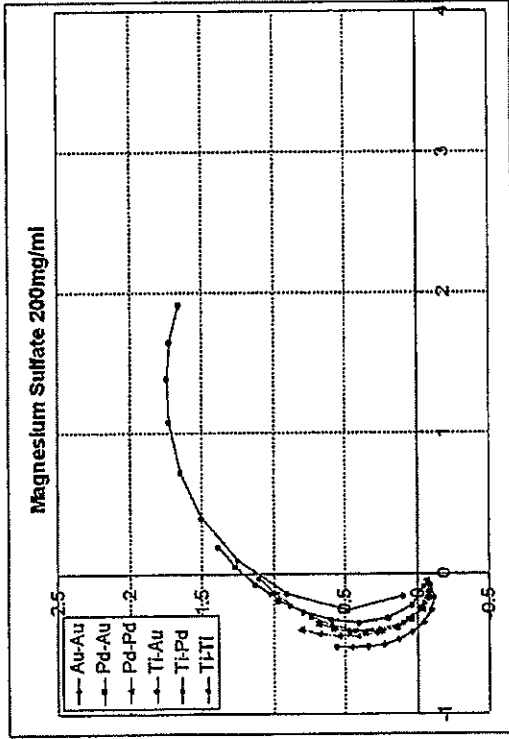


FIG. 19I

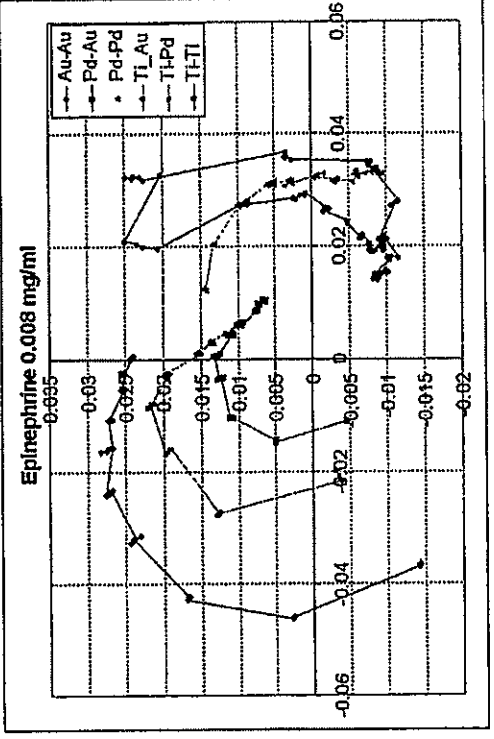


FIG. 19K

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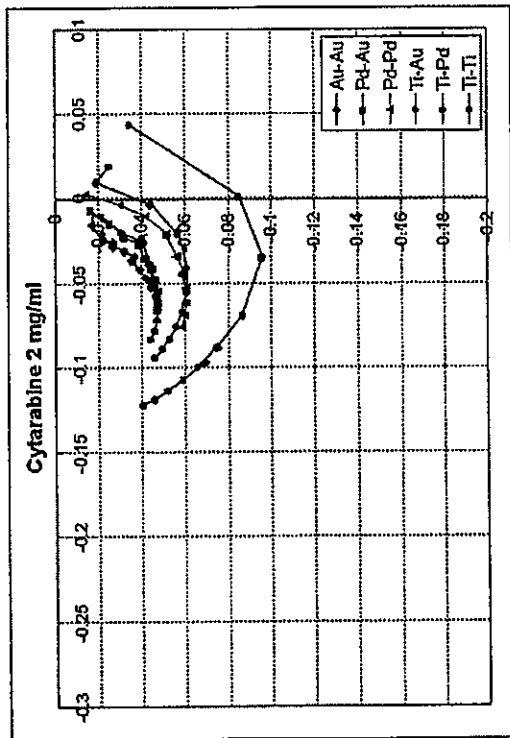


FIG. 19N

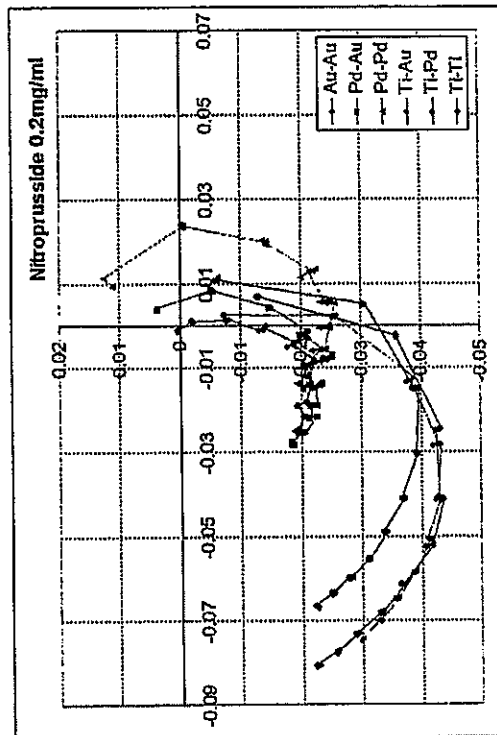


FIG. 19p

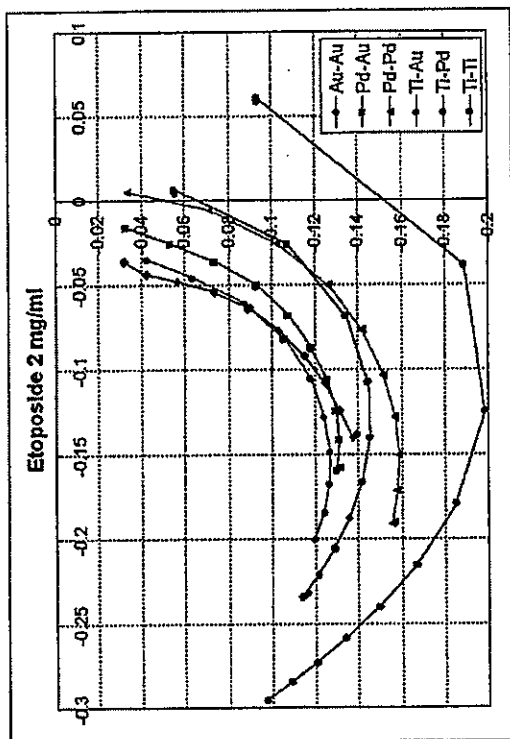


FIG. 19M

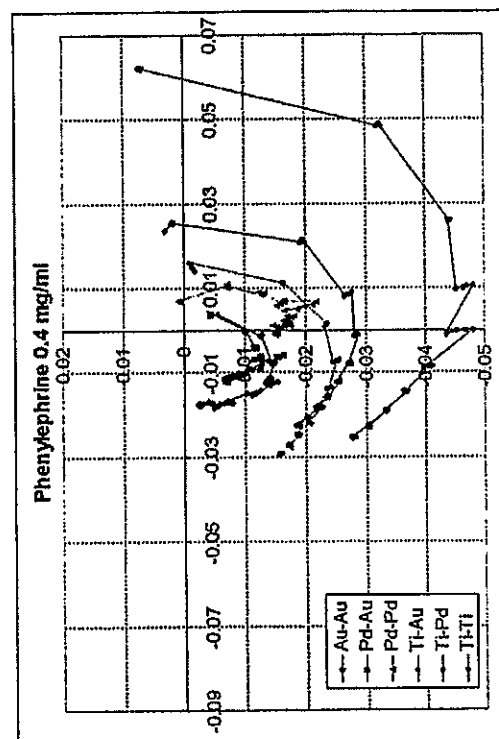


FIG. 19o

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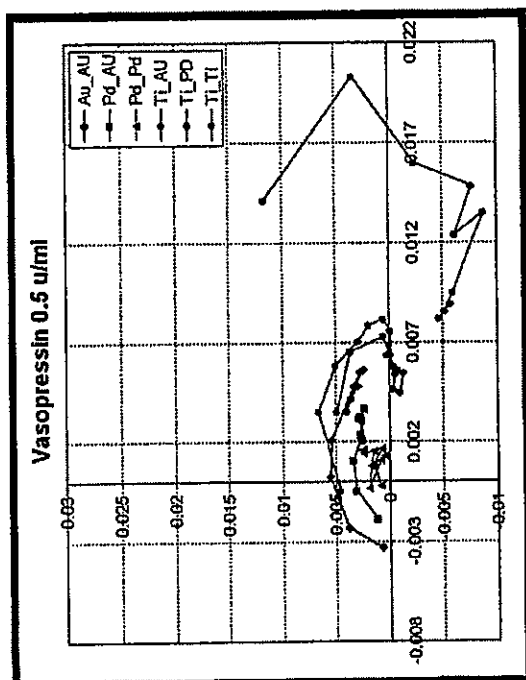


FIG. 19R

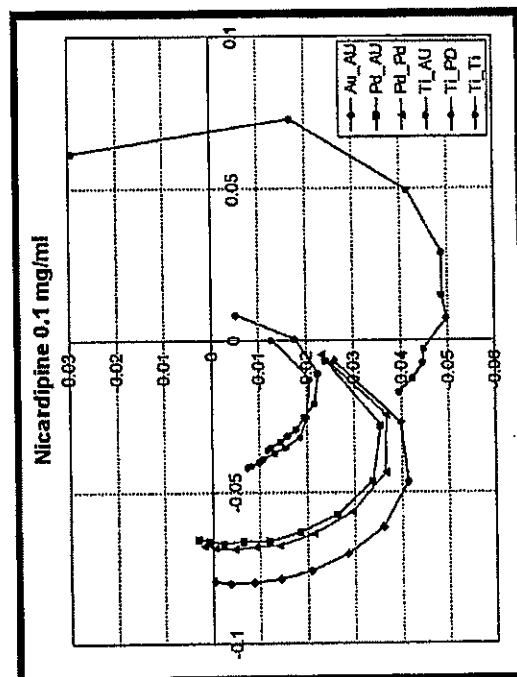


FIG. 19T

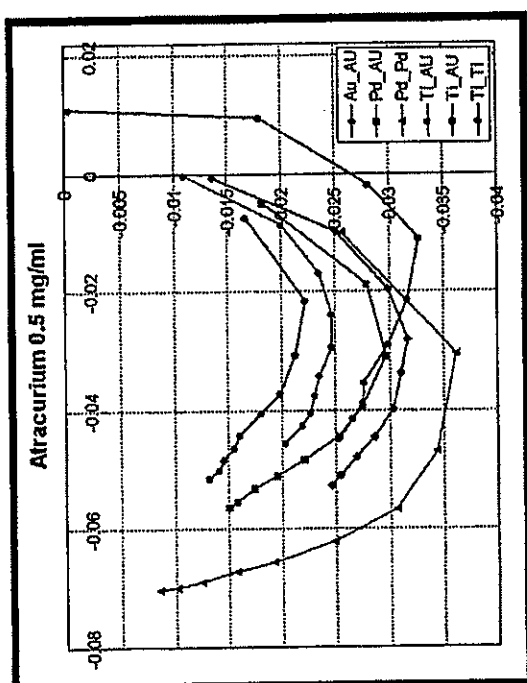


FIG. 19Q

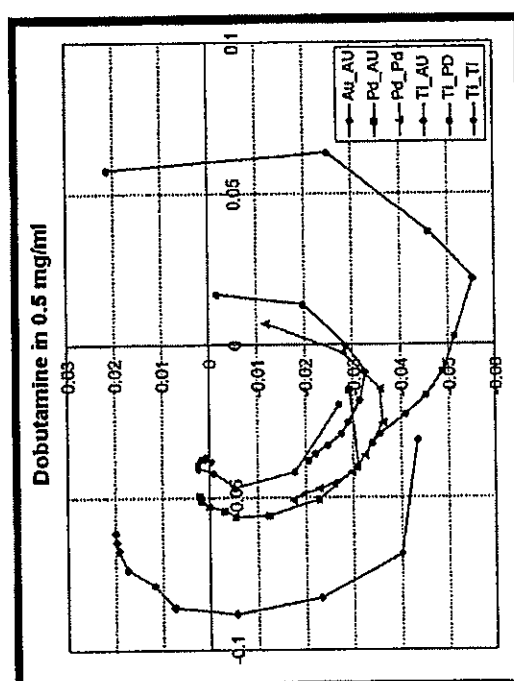
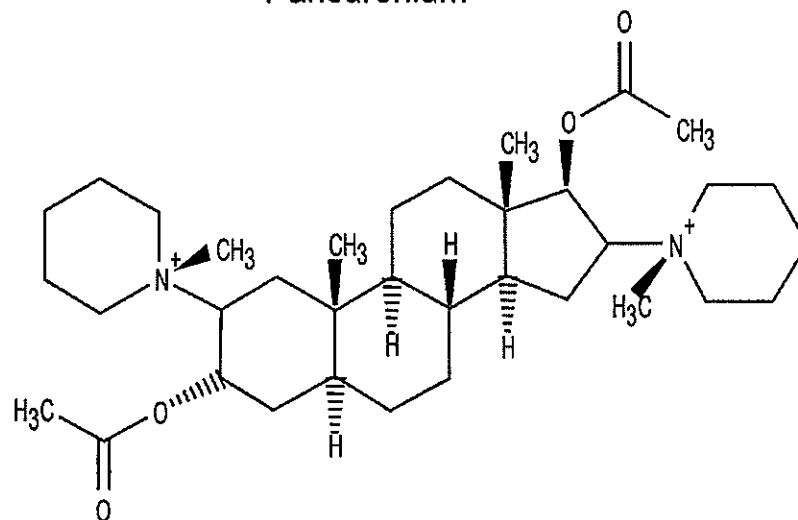


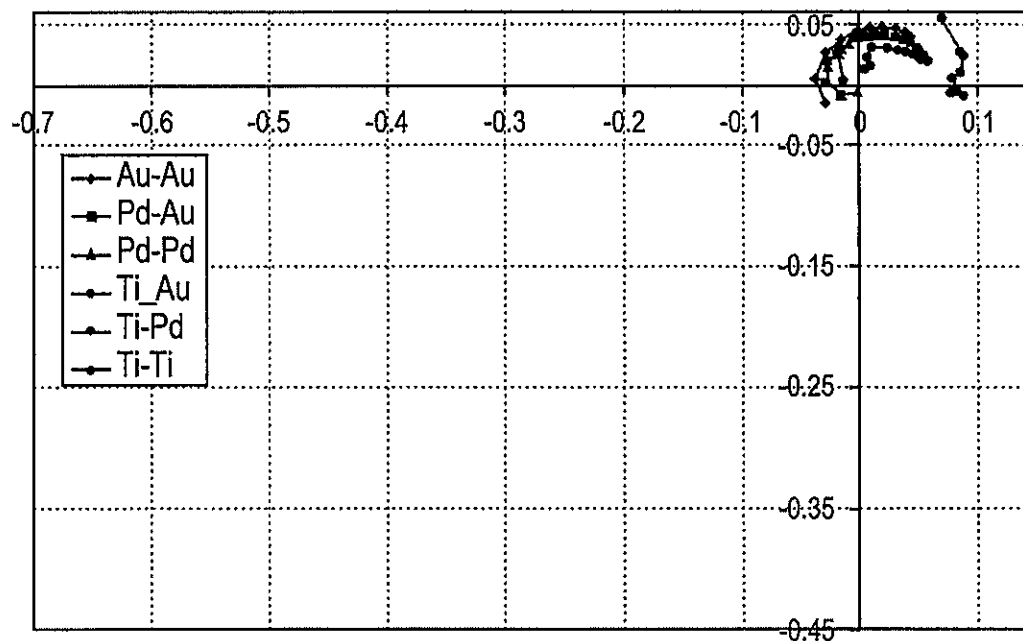
FIG. 19S

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Pancuronium

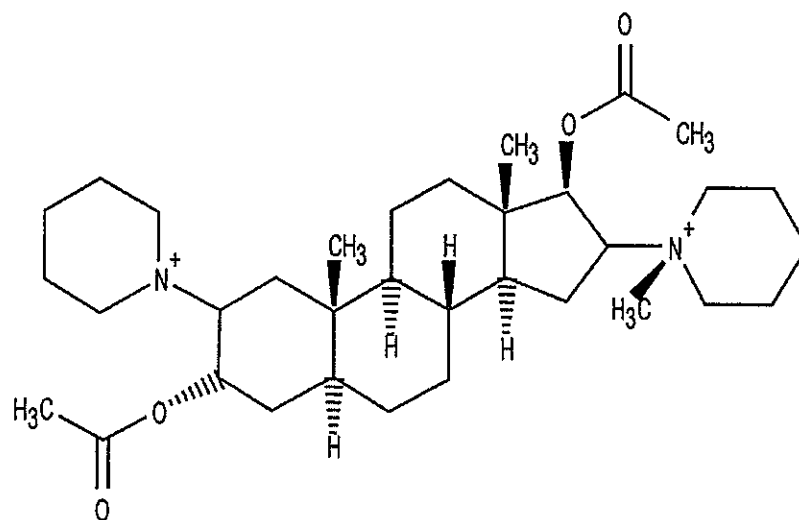
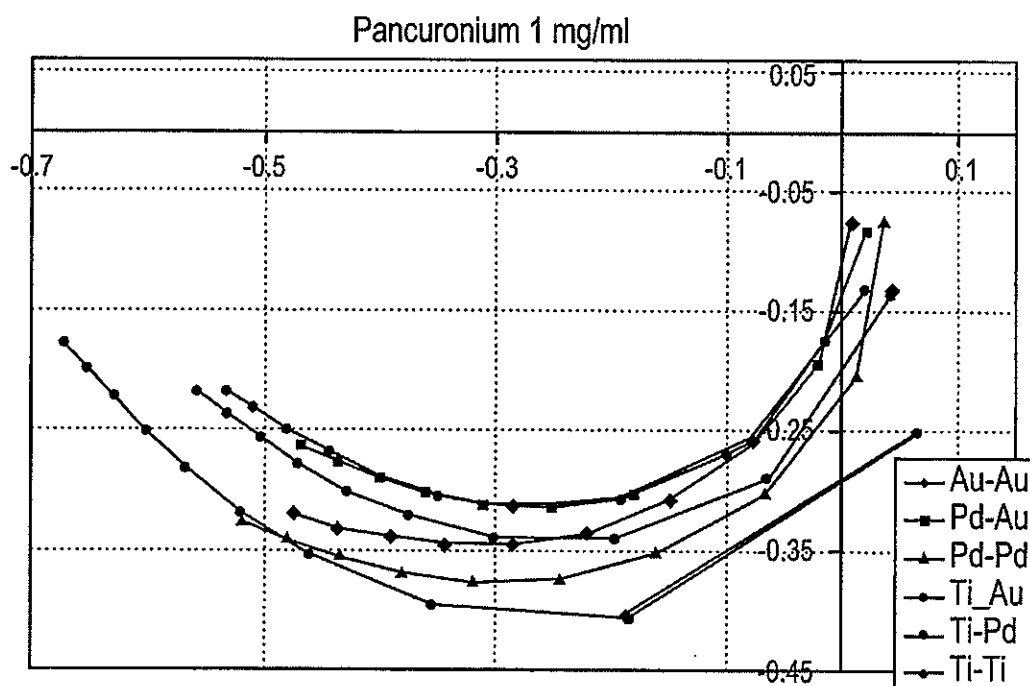
Formula: C₃₅H₆₀N₂O₄Mol. mass: 572.861 g/mol

Vecuronium 1 mg/ml

**FIG. 20A**

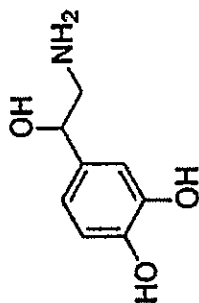
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Vecuronium

Formula: $C_{34}H_{57}N_2O_4^+$ Mol. mass: 557.827 g/mol**FIG. 20B**

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Norepinephrine

Formula: $C_8H_{11}NO_3$

Mol. mass: 169.18 g/mol

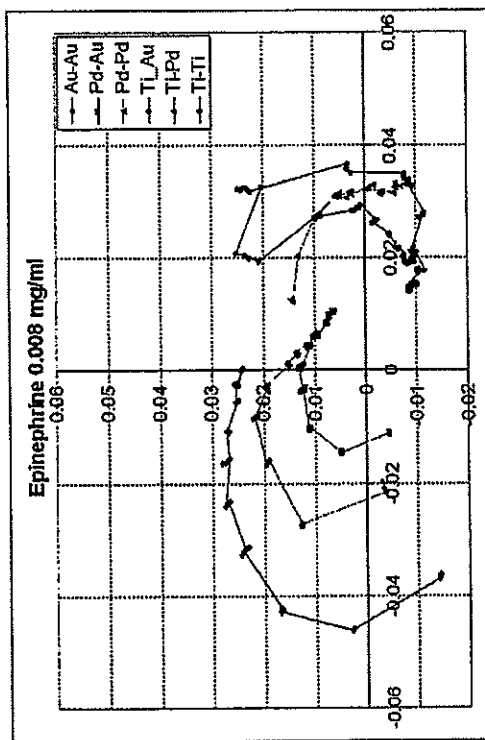
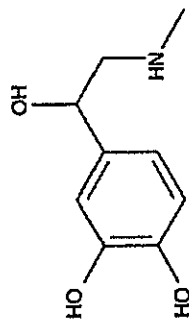


FIG. 21B

Epinephrine

Formula: $C_9H_{13}NO_3$

Mol. mass: 183.204 g/mol

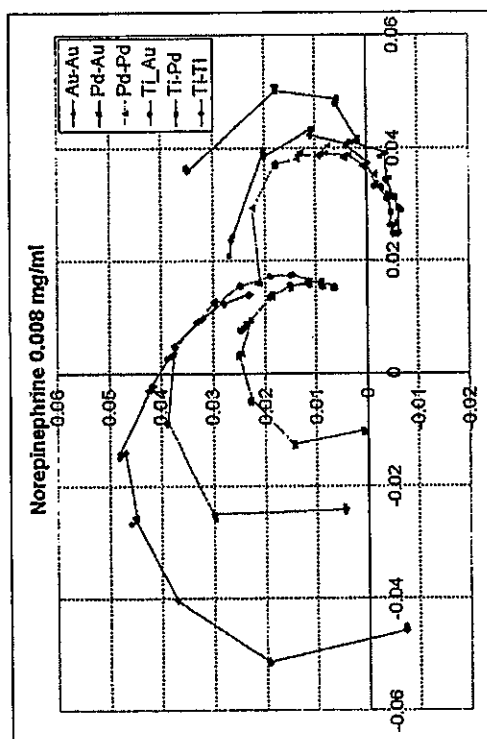
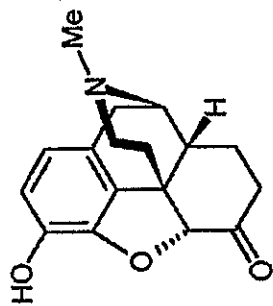


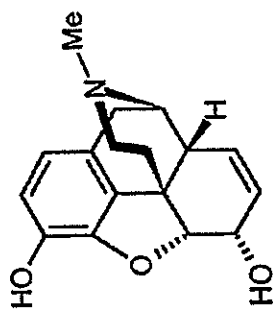
FIG. 21A

Hydromorphone



Formula: $C_{17}H_{19}NO_3$
 Mol. mass: 285.34 g/mol

Morphine



Formula: $C_{17}H_{19}NO_3$
 Mol. mass: 285.34 g/mol

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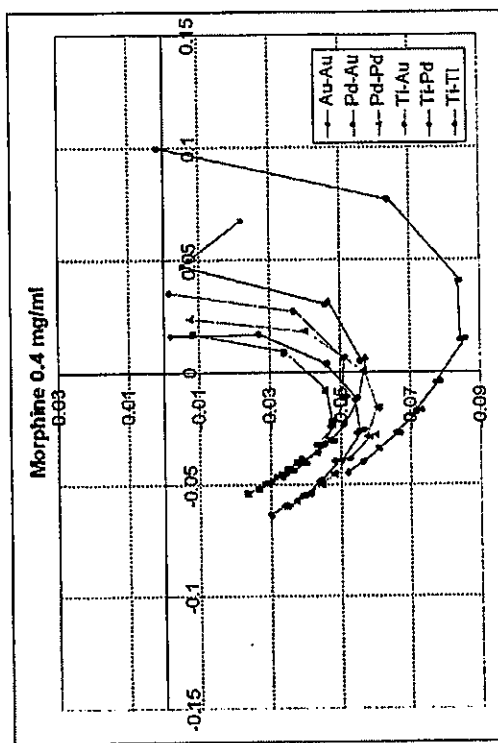


FIG. 22B

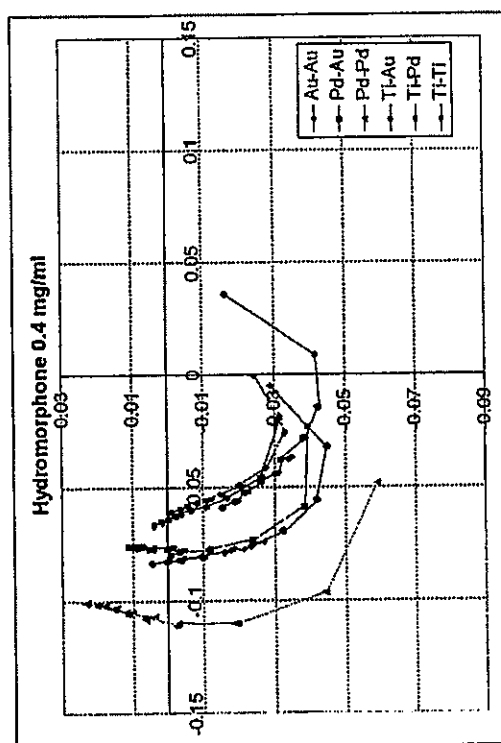


FIG. 22A

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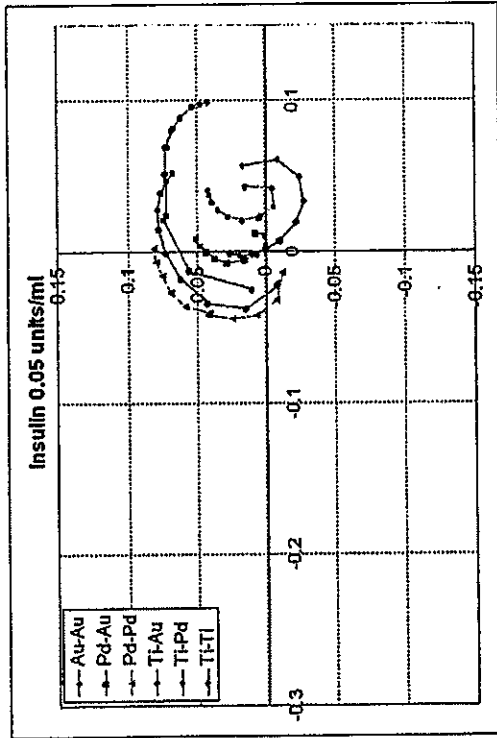


FIG. 23B

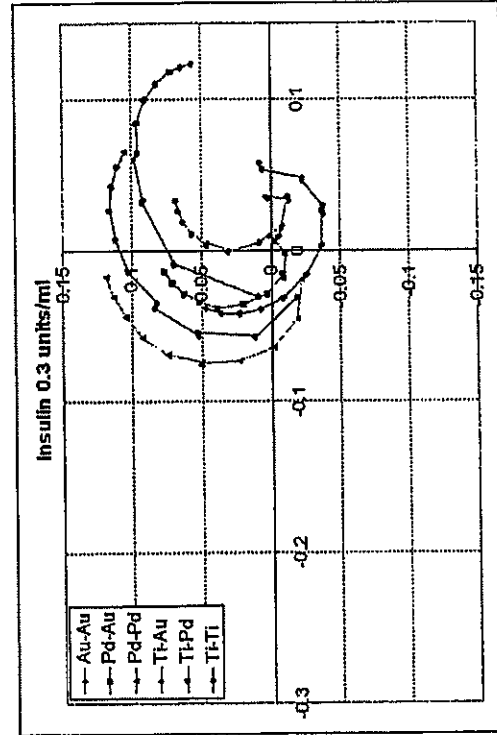


FIG. 23D

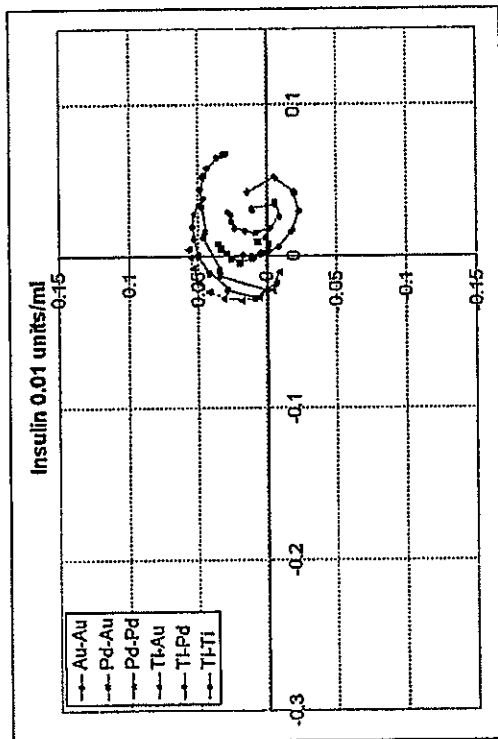


FIG. 23A

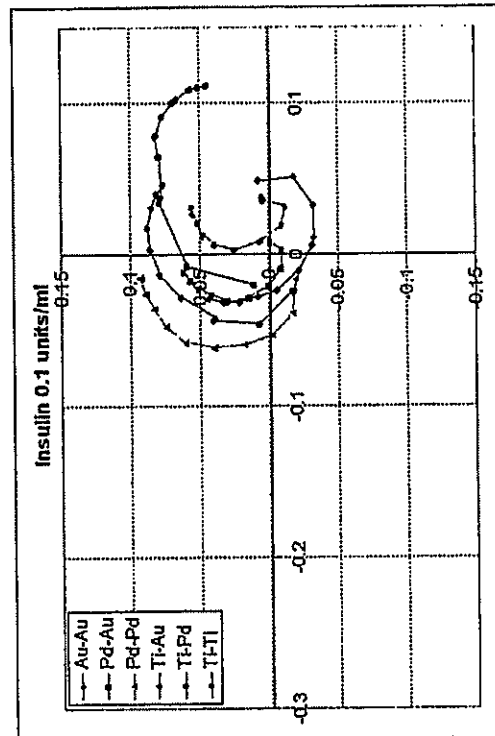
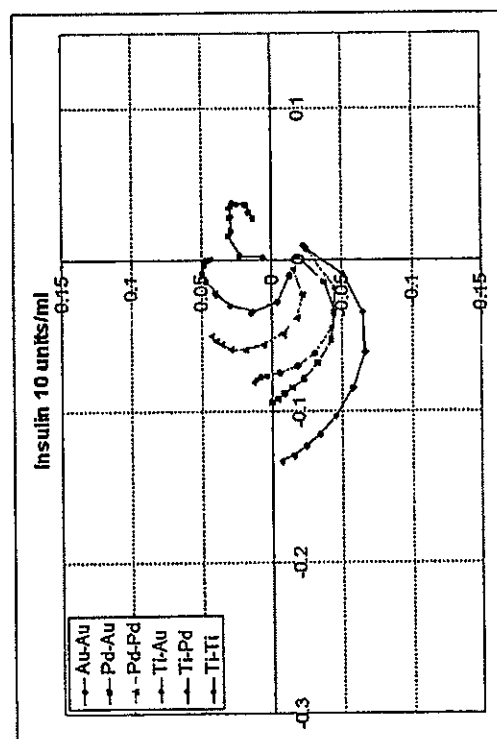
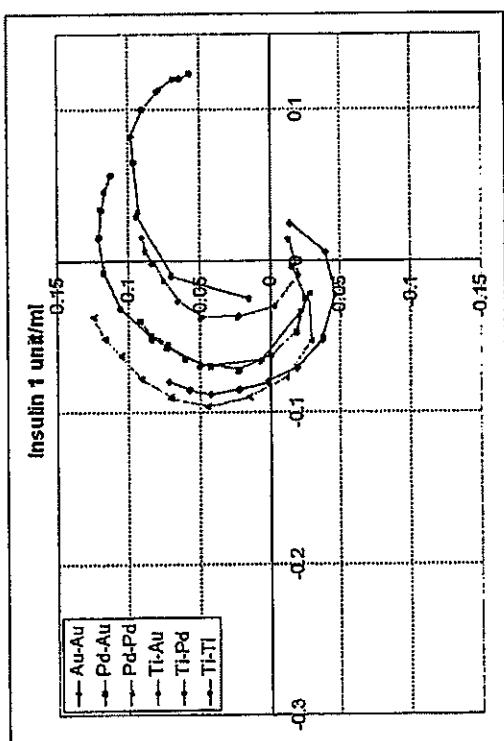
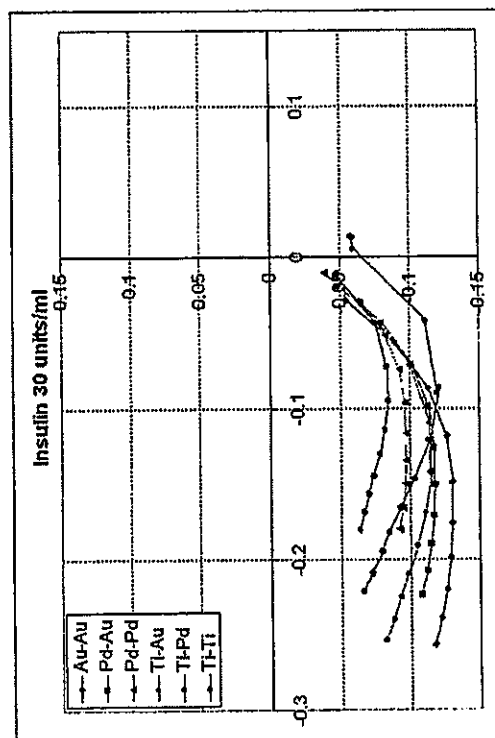
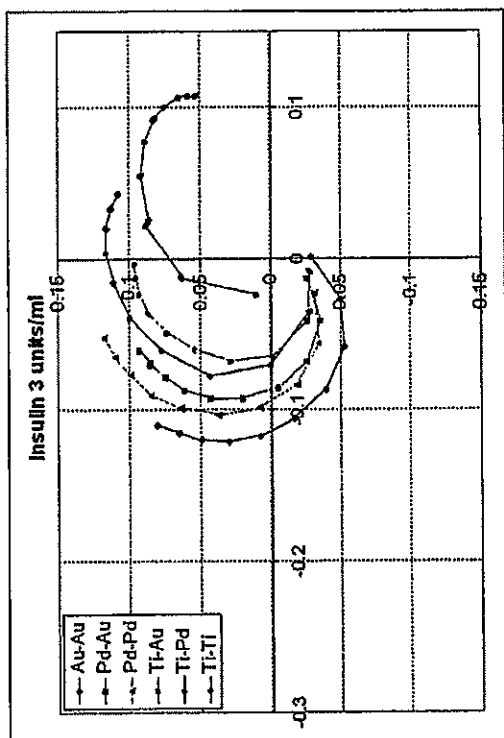


FIG. 23C

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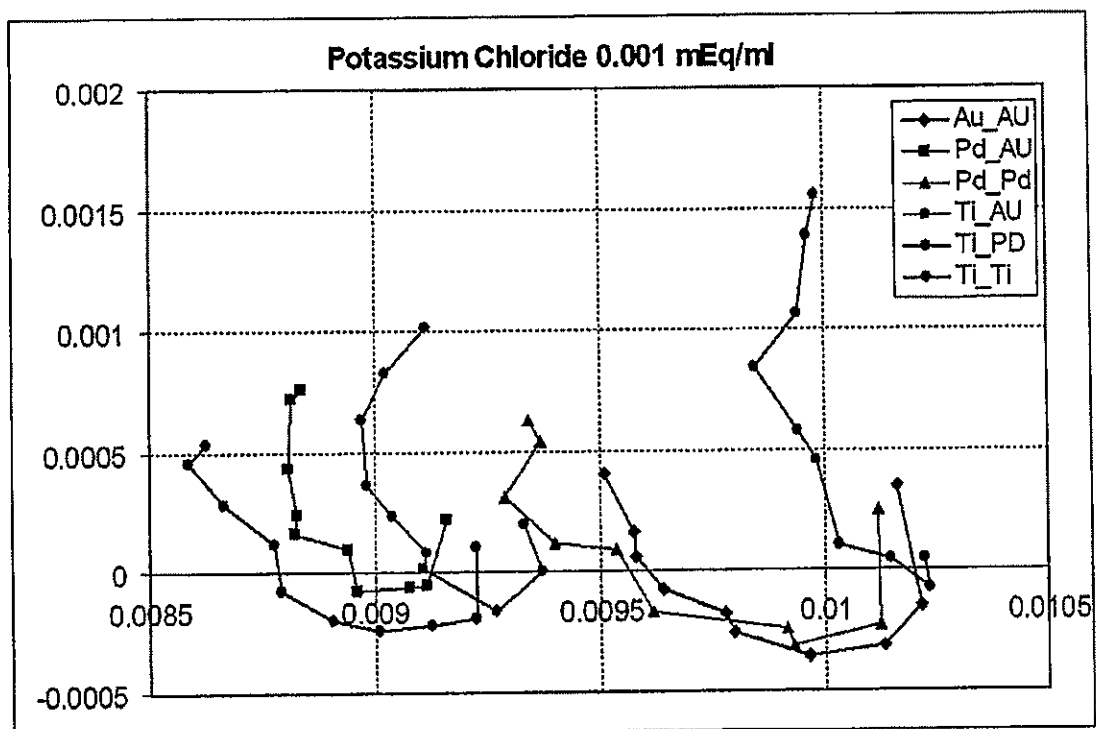


FIG. 24A

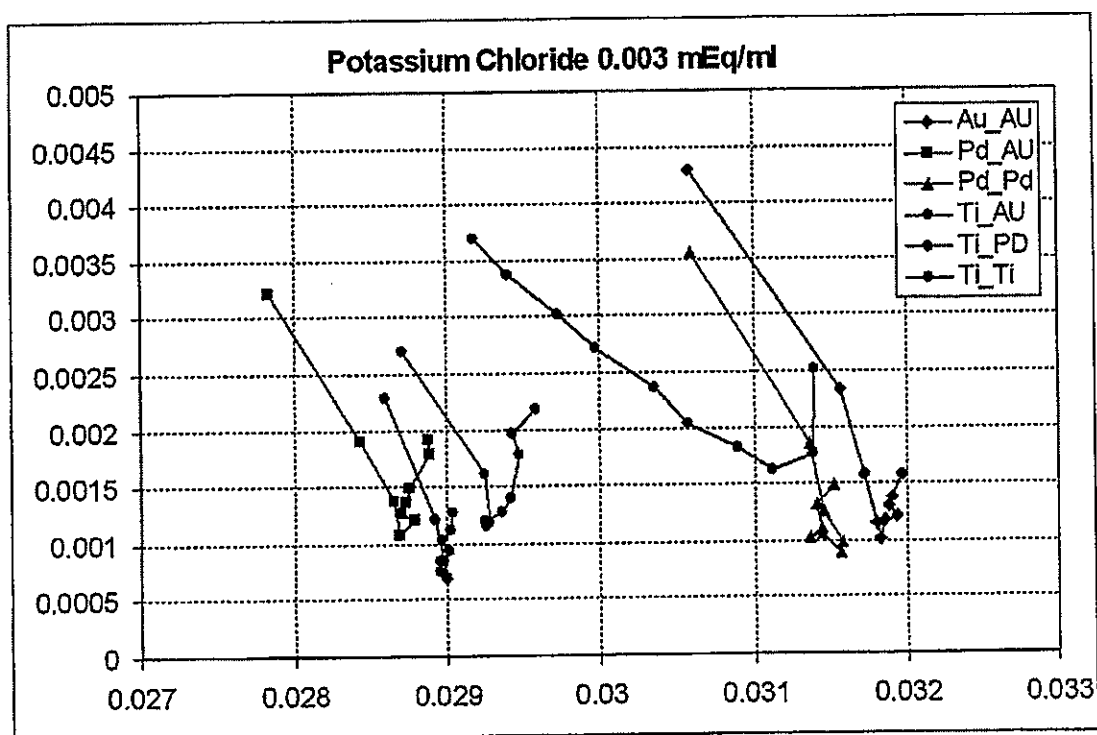


FIG. 24B

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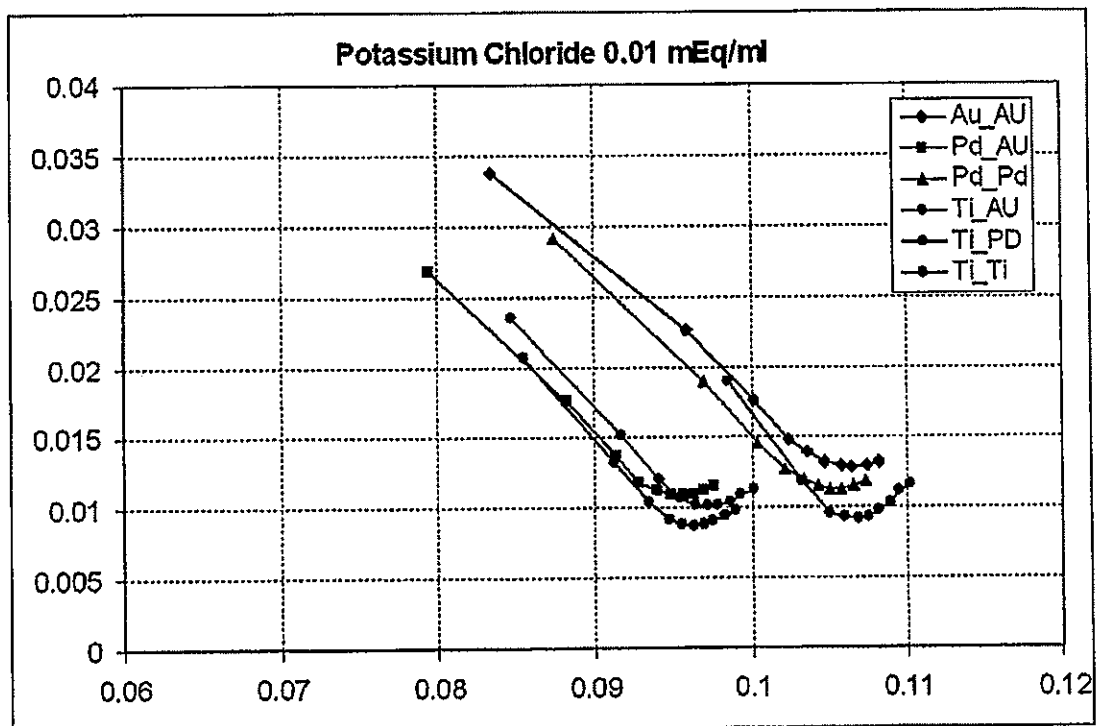


FIG. 24C

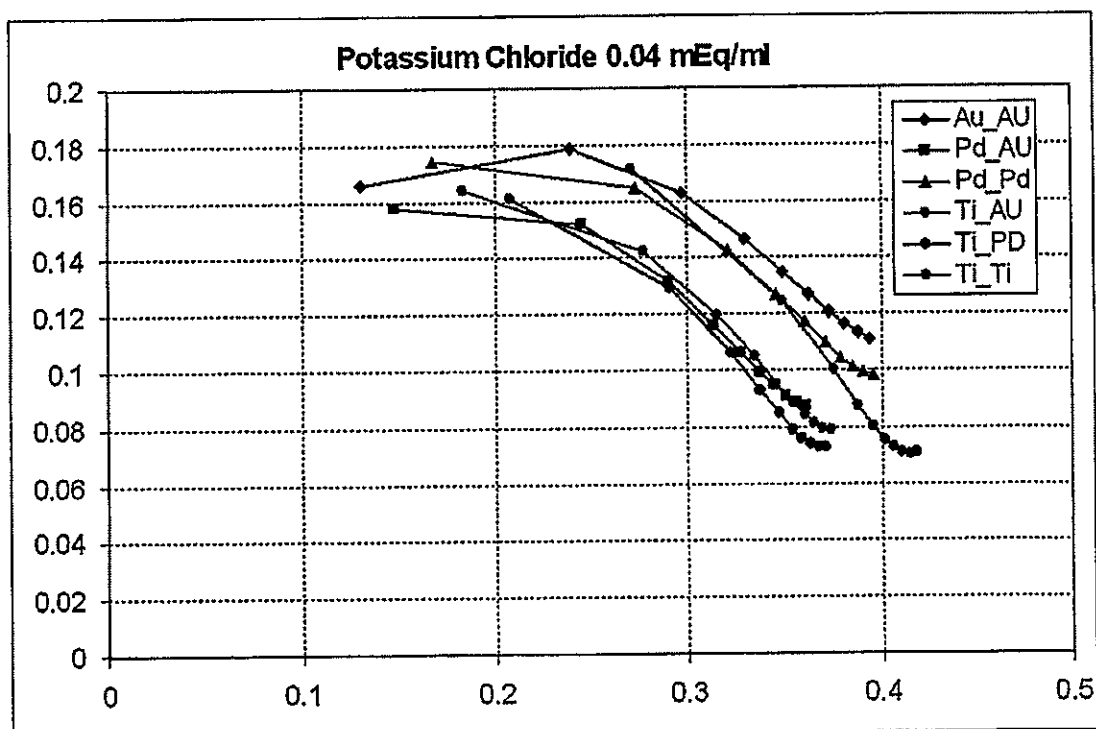


FIG. 24D

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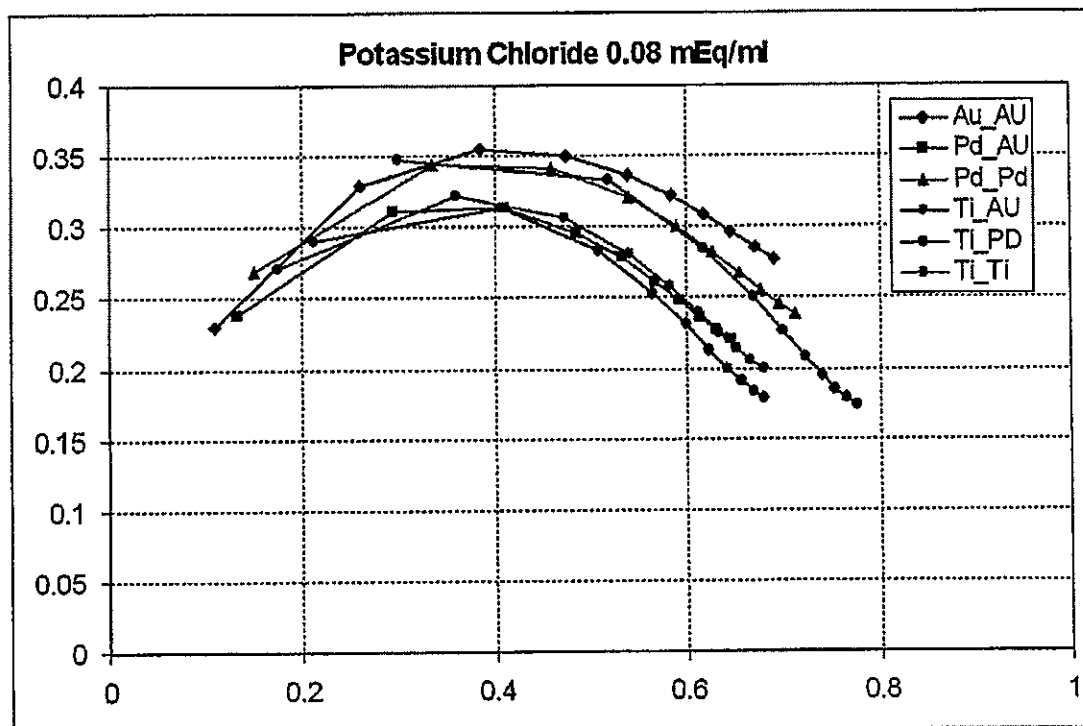


FIG. 24E

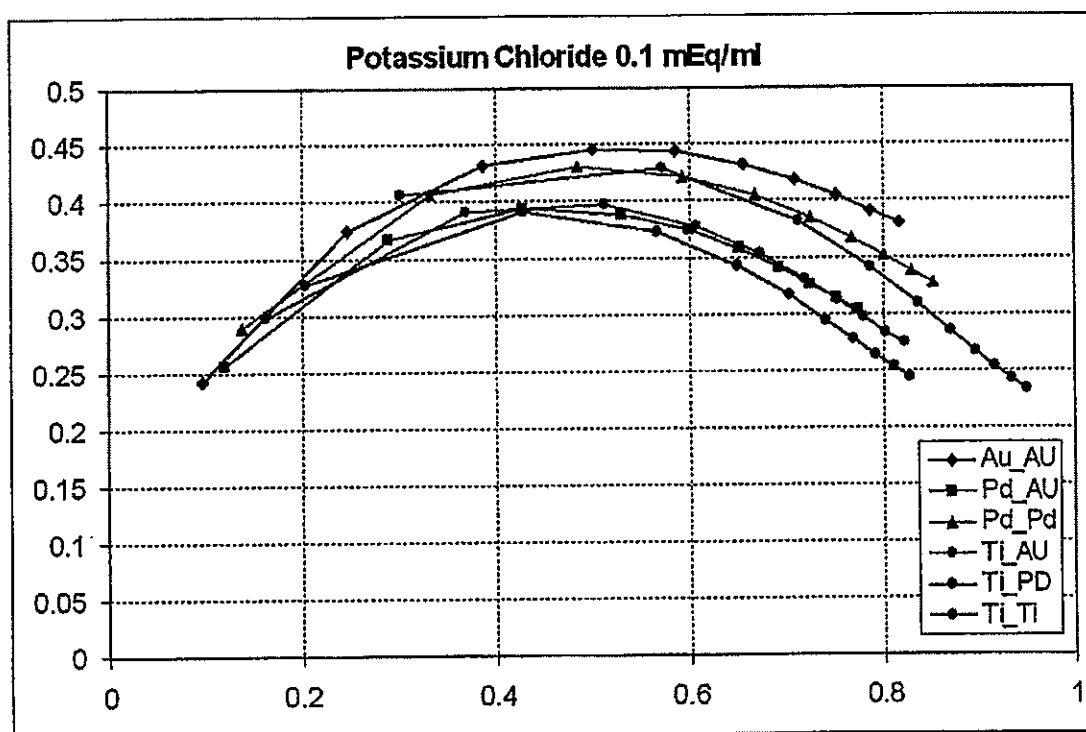


FIG. 24F

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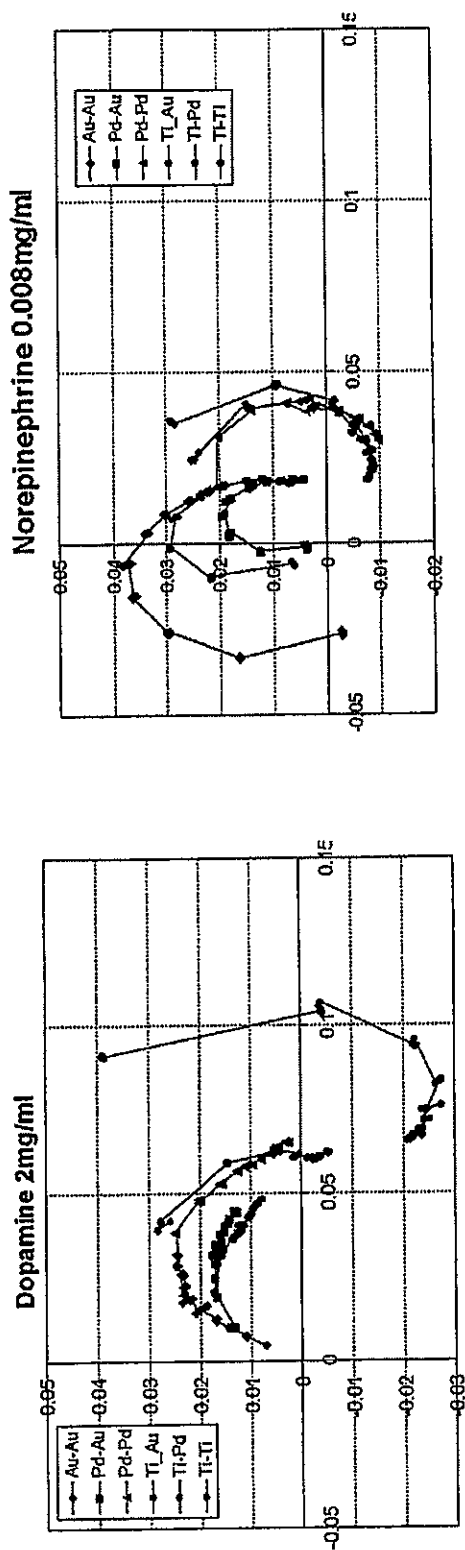


FIG. 25A

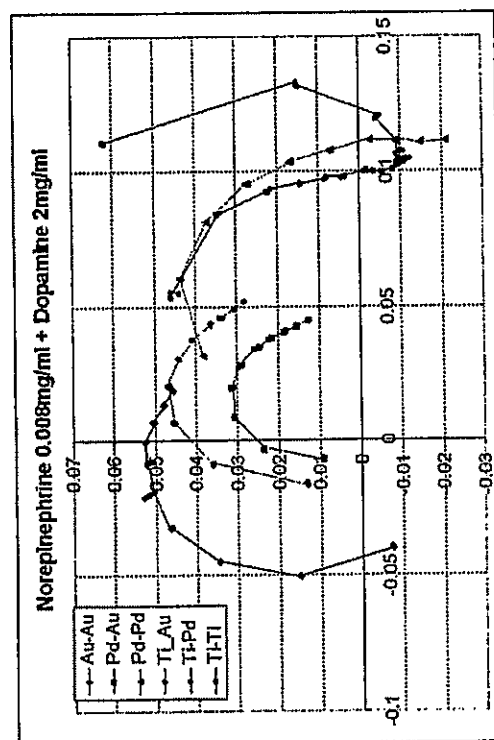


FIG. 25B

FIG. 25C

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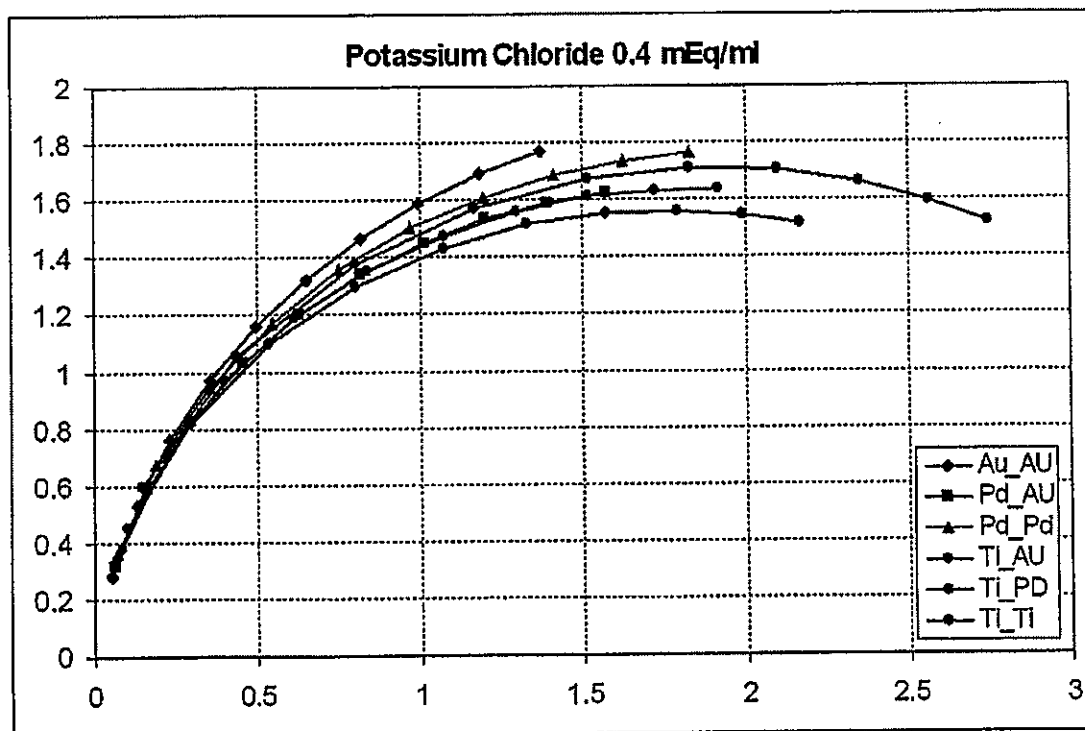


FIG. 24G

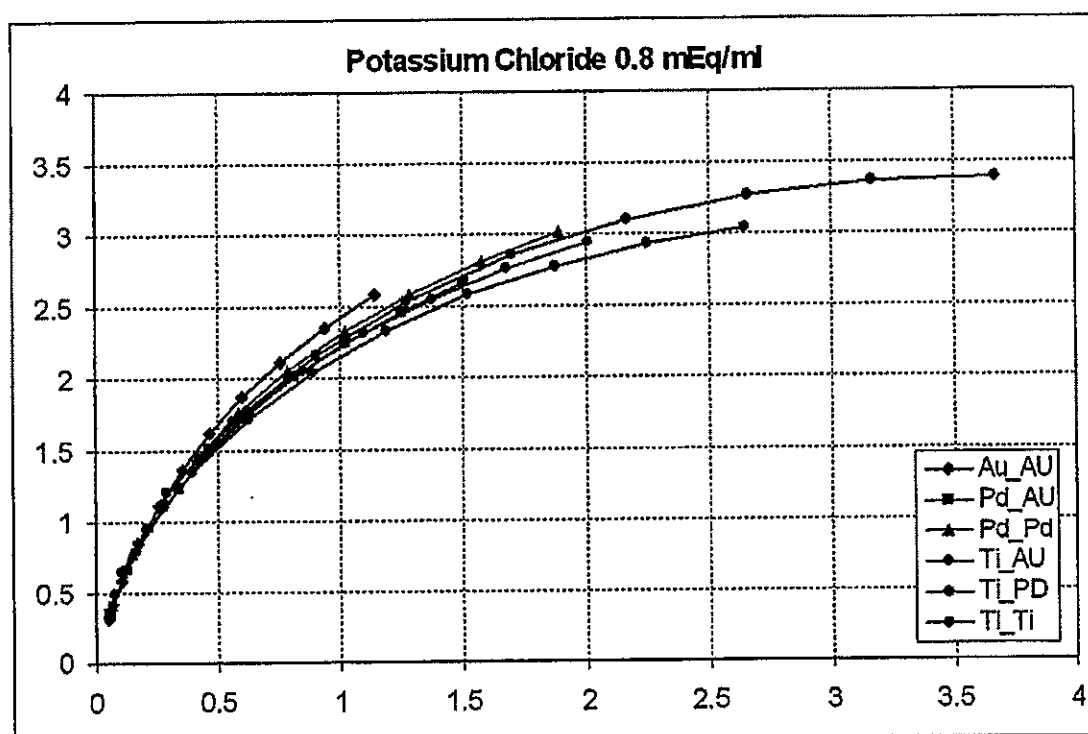


FIG. 24H

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Midazolam 0.5 mg/ml - Saline

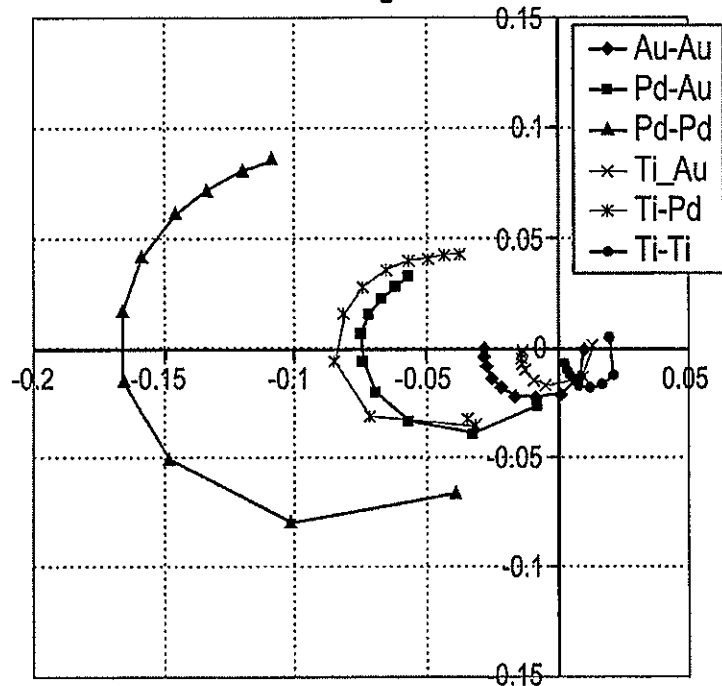


FIG. 26A

Heparin@100 units/ml - Saline

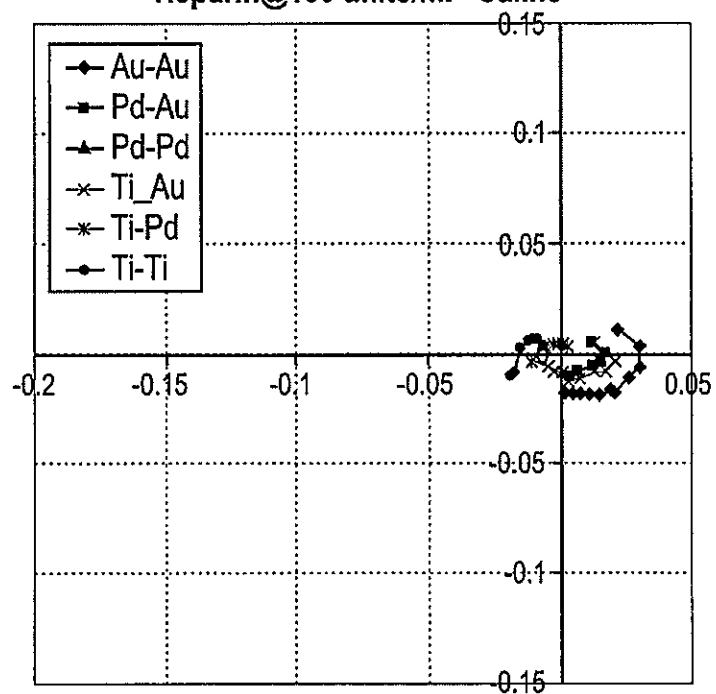


FIG. 26B

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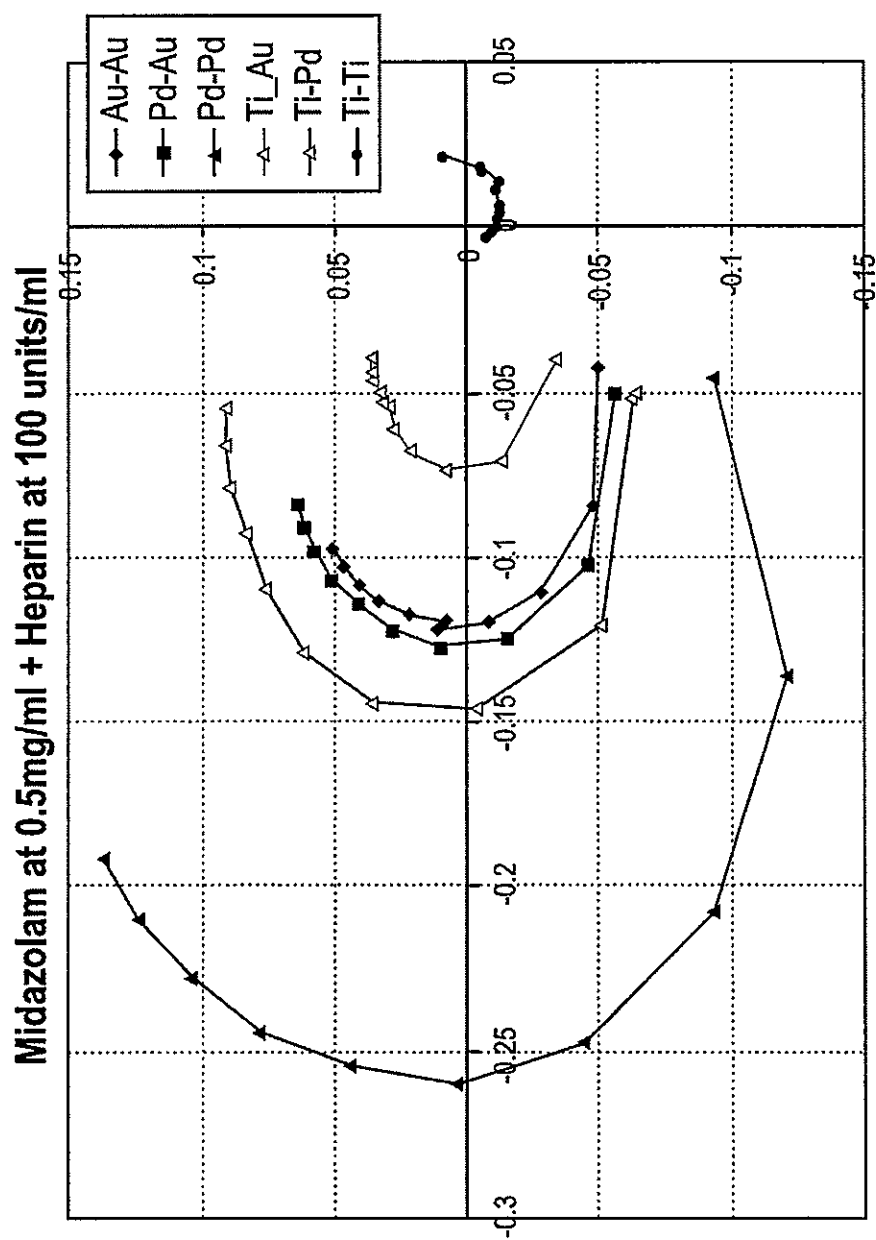


FIG. 26C

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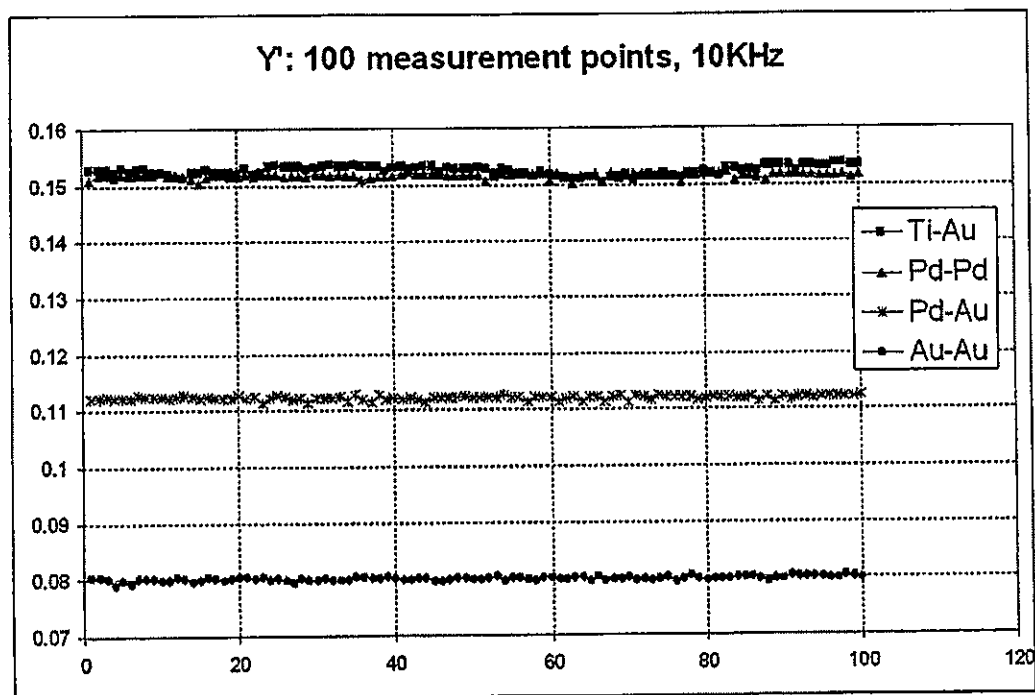


FIG. 27A

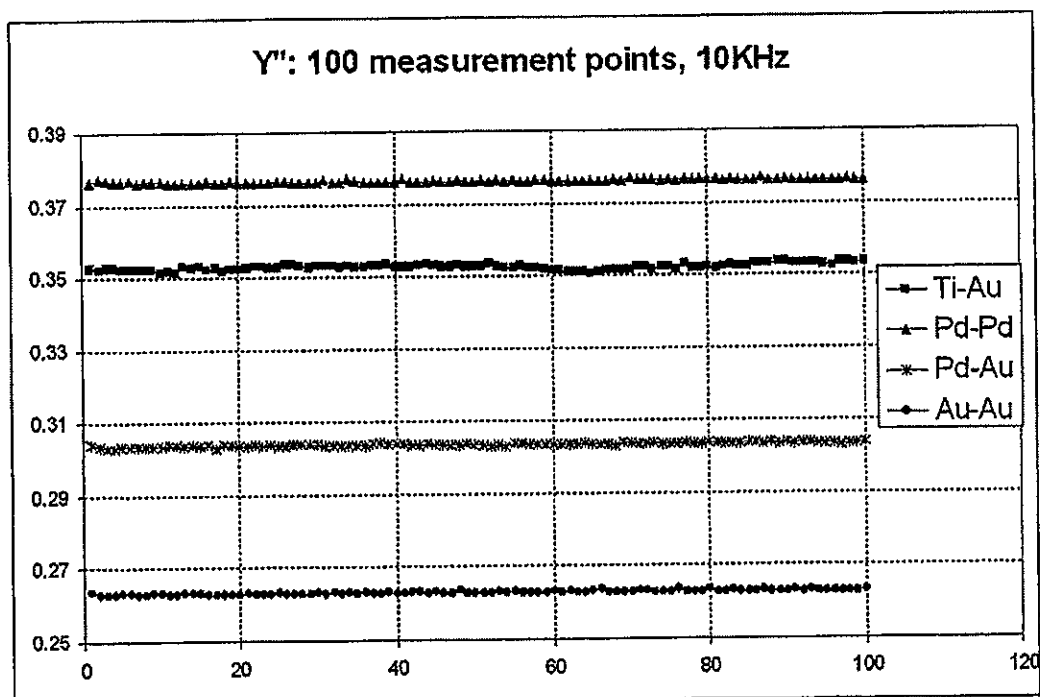


FIG. 27B

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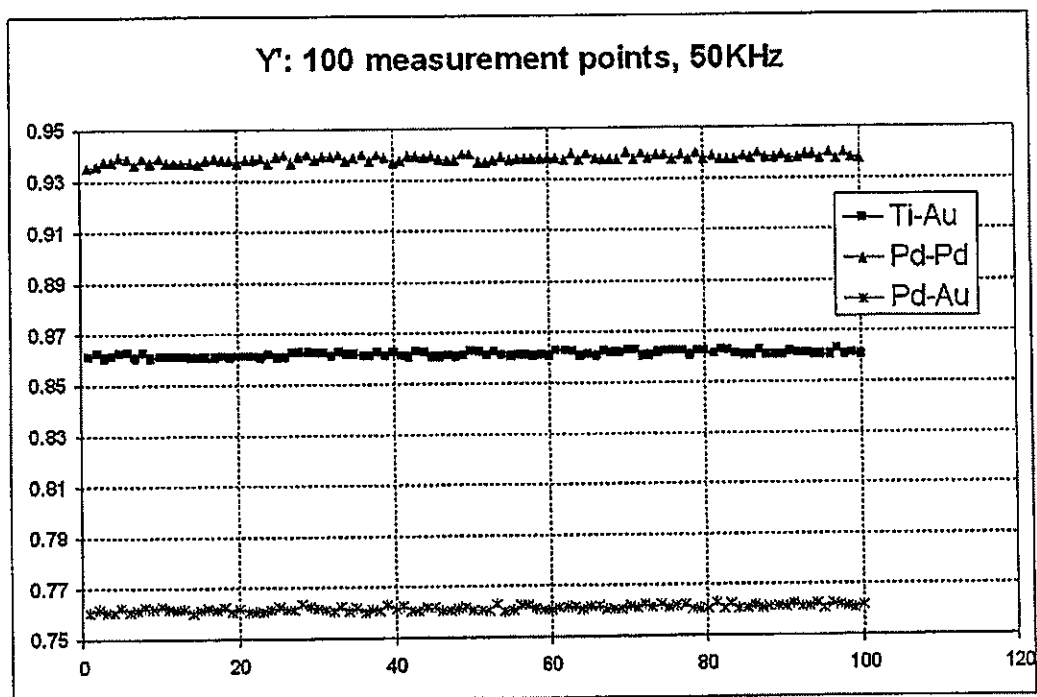


FIG. 28A

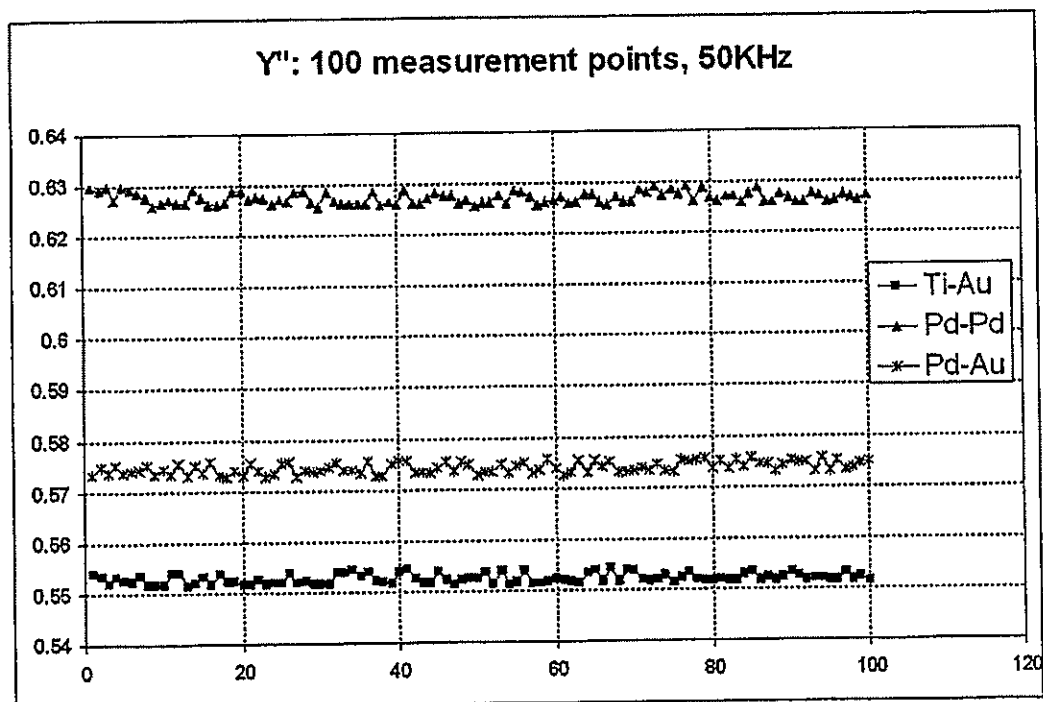


FIG. 28B

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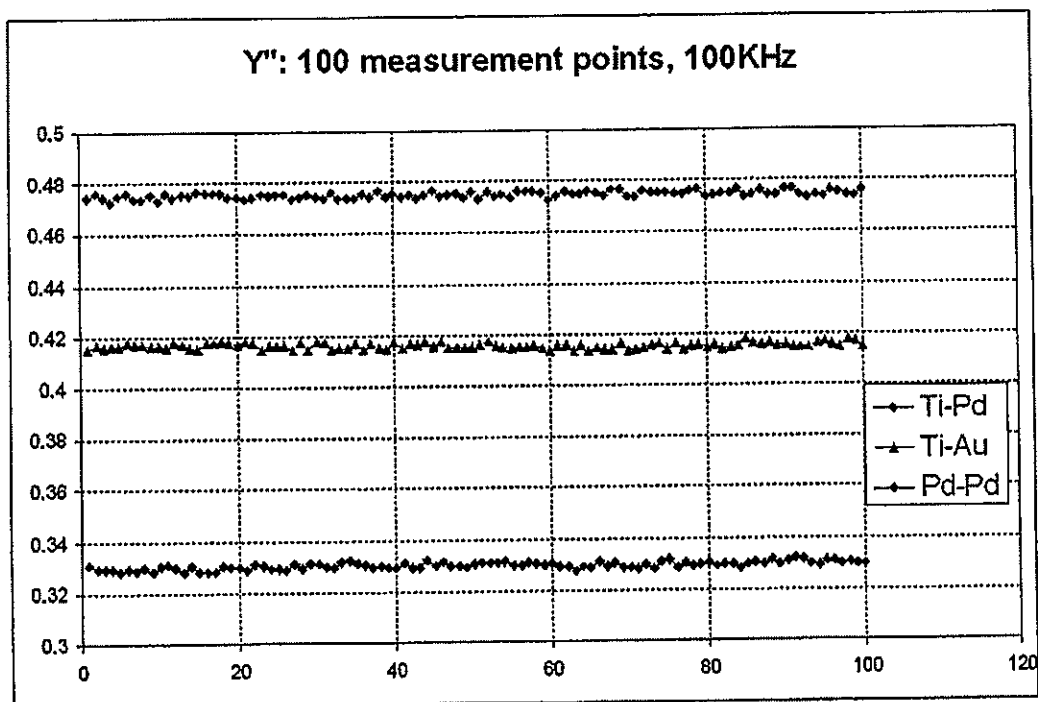


FIG. 29A

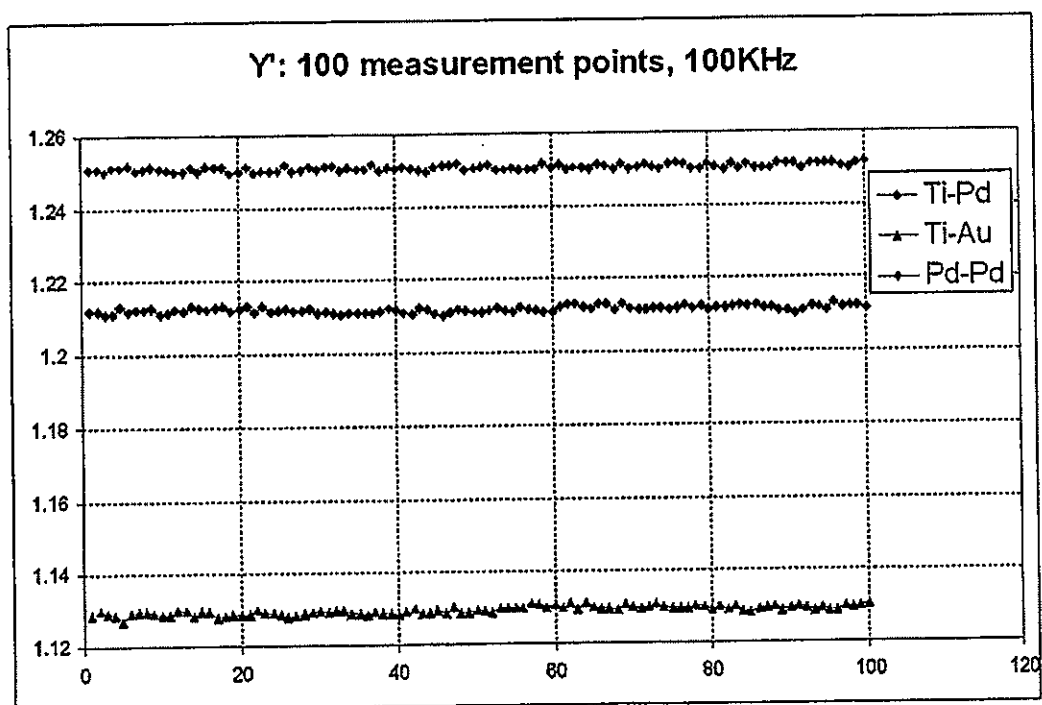


FIG. 29B

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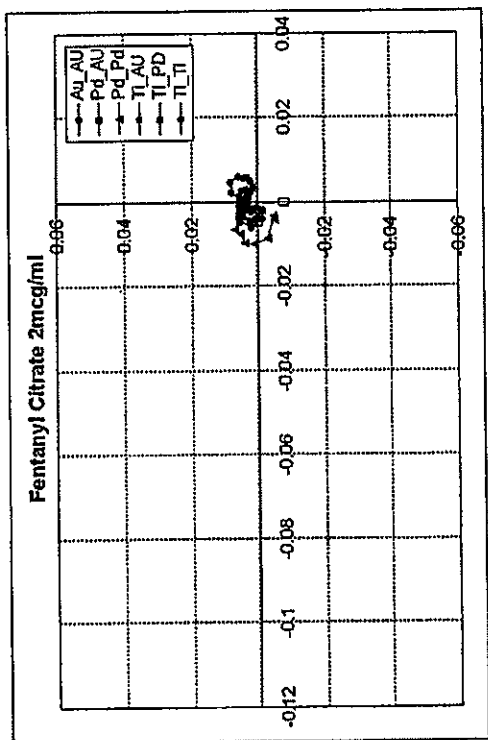


FIG. 30B

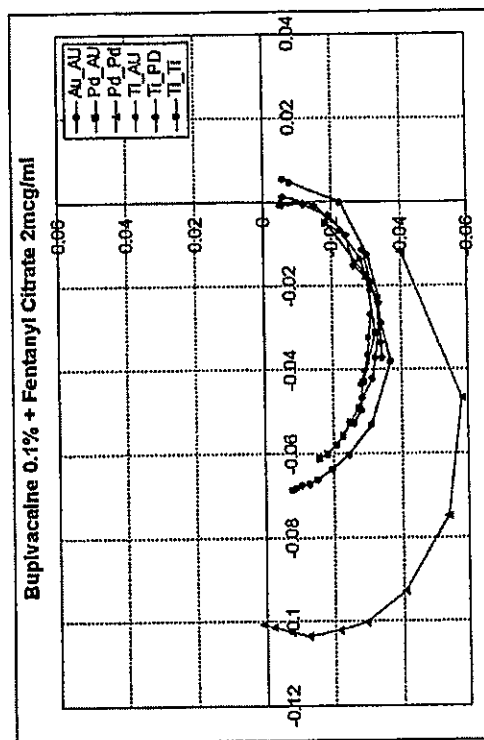


FIG. 30C

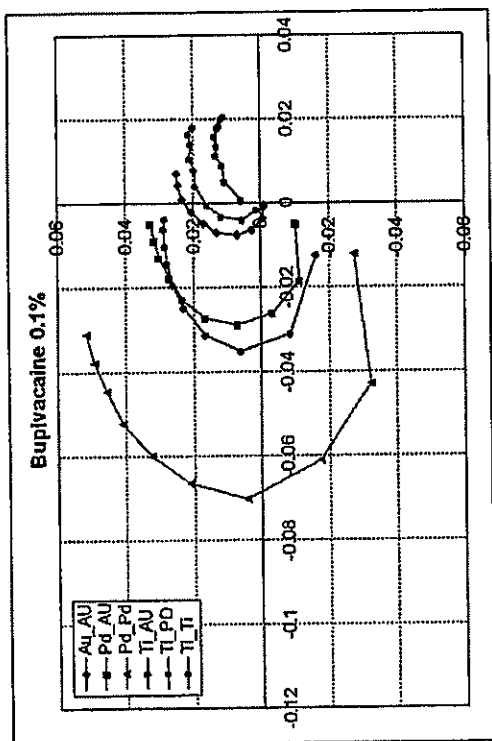


FIG. 30A

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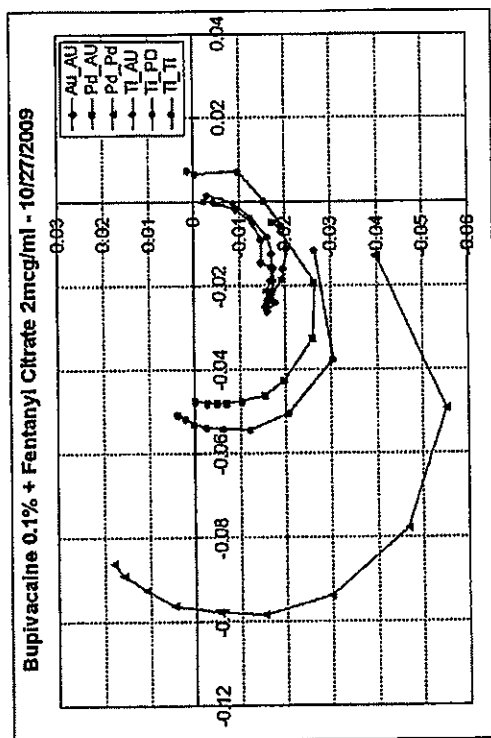


FIG. 31B

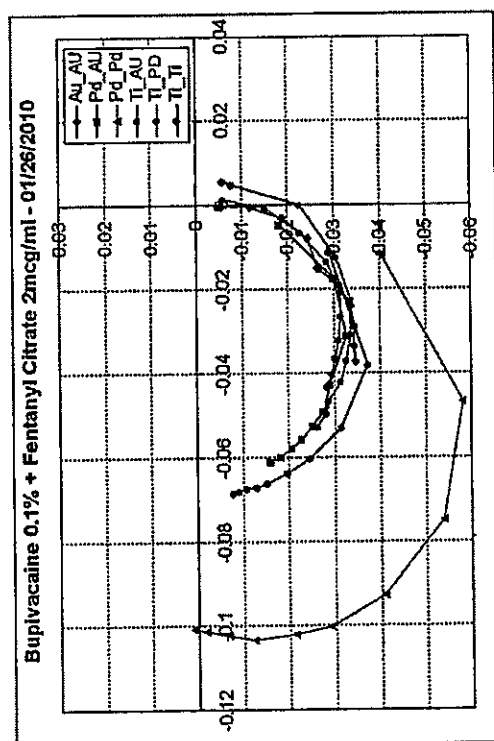


FIG. 31A

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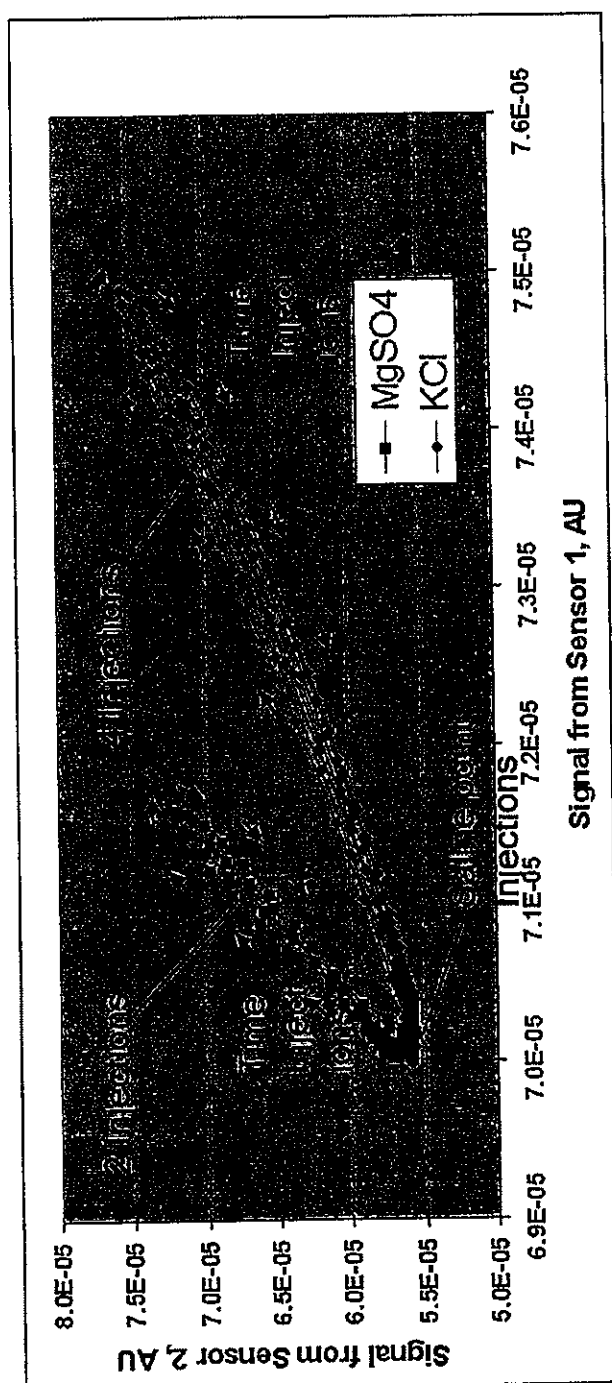


FIG. 32